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DECORATED WINDOWS.

A TREATISE

ON THE

RISE AND PROGRESS

OF

DECORATED WINDOW TRACERY

IN

ENGLAND.

ILLUSTRATED WITH NINETY-SEVEN WOODCUTS AND
SIX ENGRAVINGS ON STEEL.

BY

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TO THE

REV. R. WILLIS, F.S.A.,

JACKSONIAN PROFESSOR IN THE UNIVERSITY OF CAMBRIDGE.

THE FOLLOWING PAGES ARE INSCRIBED,

IN TOKEN OF THE MANY SERVICES HE HAS RENDERED TO

THOSE ENGAGED IN THE STUDY OF

Church Architecture,

BY HIS FRIEND,

THE AUTHOR.

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DECORATED WINDOWS.

PART I.

THE CLASSIFICATION OF TRACERIED WINDOWS, AND THEIR SEVERAL PARTS.

CHAPTER I.

INTRODUCTION.

In originally describing this work as a collection of examples illustrative of the Window Tracery of the Decorated Period of English Architecture, a mode of phraseology was employed which would be familiar to all who have of late years been engaged in the study of the Church Architecture of this country, and would therefore satisfactorily convey the intentions of the Publisher and the object of the work.

It is to Mr. Rickman that we are indebted for that classification of the styles of English Architecture, and that system of Nomenclature which has been almost exclusively used by recent writers on the subject.

The excellence of this Classification and Nomenclature, and their sufficiency for the purpose for

which they were intended, are best evidenced by the fact, that, although the attempts to supersede them have been both numerous and persevering, Mr. Rickman's "Attempt to discriminate the Styles of Architecture in England,"* still remains the best guide of the Architectural Student in his first inquiries into the History of the Art, and the principal text-book from which most of the popular publications of the day on the subject have been compiled.

In estimating, however, the value to us, at the present time, of Mr. Rickman's Classification, and the advantage of retaining it, regard must be had to the object with which it was originally proposed, and the amount of knowledge possessed on the subject at the time he wrote.

One of the prevailing errors of earlier writers was an anxiety to discover such distinctive marks in different buildings belonging to the same style as should entitle them to separate classification.

The imaginary nature of these distinctions, and the variety and discrepancy of the opinions held by different writers upon this point—scarcely two of them agreeing to use the same nomenclature, to recognize the same distinctions, or to apply the same rules as a test in regard to date—were all circumstances tending to confuse and to distract rather than to fix the attention of the architectural student.

When, therefore, Mr. Rickman, following the footsteps of Milner, determined to arrange and

* Longman, London.

condense the established facts and discoveries of earlier writers, as well as the results of his own observation, in a system which should be at once simple and comprehensive, and proceeded with this view to divide the whole of our Church Architecture into four Periods or Styles, he rendered a great service to those engaged in the subject, and enabled students, by means of the admirable descriptions which accompanied his classification, readily to apprehend the leading characteristics of these four styles, and practically to apply his rules to all the buildings which might fall within their reach and observation.

Although, however, the sufficiency of Mr. Rickman's Classification for the purpose for which it was intended, has been thus satisfactorily proved, and his reputation, as the first eminent Historian of the Art, permanently established, it may be a question how far a division so simple as to fix the attention of early students, and, on that account, so necessary for preliminary inquiry, is one that, in the present advanced state of knowledge on the subject, is calculated to satisfy the requirements of descriptive writers of the present day.

It is clear that Mr. Rickman might, with equal correctness, have divided the entire duration of the Mediæval Styles into five, six, or even seven Periods instead of four, had he chosen to do so. It is probable, however, that the simplicity of his system was the chief element of its success, as well as his reason for adopting it.

He must, nevertheless, have known, what is now beginning to be generally admitted, that our National Architecture, from its earliest infancy to the period of its entire debasement, was in a constant state of regular progression or transition, and that this progress was not only uniform and constant, but carried on in different parts of the country very nearly simultaneously.

We have been so much in the habit of classing our buildings according to their leading peculiarities, in one or other of these four styles, that we have been apt to overlook this fact, and its important bearing upon the gradual development of our knowledge upon the subject.

It is difficult to say what accuracy of information may not hereafter be attained by the joint operation of the various architectural and archæological associations now in active existence in different parts of the country, and the increasing efforts of those who have undertaken the illustration of this interesting branch of History and Art.

It would not be too much to predict, that, classing our buildings, as we do at present, in four large groups, we may, at no great distance of time, be able to class them, not by *centuries*, but by *decades* of years.

Whether, looking at the additional information we already possess, the time has *now* arrived for a more detailed division of the Church Architecture of this country, than that which has been bequeathed to us by Mr. Rickman, and which has

hitherto served our purpose so well, is a question which manifestly lies out of the limits of the present essay: at the same time, it may be assumed that the consideration of so much of it as applies to the particular feature which we have undertaken to illustrate, lies peculiarly within our province.

It has become, in fact, our legitimate task, now that the series of examples which have been periodically presented to our readers is completed, to consider how we shall classify them; to examine their points of contrast and resemblance; to inquire whether the peculiarities which distinguish some from others are not such, and so great, as to render it difficult and inconvenient, if not actually incorrect, to comprehend the whole of the Tracery of the so-called "Decorated" Period in one undivided class, and under one general denomination.

CHAPTER II.

DIVISION OF TRACERIED WINDOWS INTO THREE CLASSES:— GEOMETRICAL, CURVILINEAR, AND RECTILINEAR.

No one who has paid much attention to the buildings of the Decorated Style, or who has consulted the descriptions of such buildings given in Mr. Rickman's Appendix, can fail to have observed that the windows of this style are divisible into two classes: one, in which the leading lines of the tracery are *geometrical;* and the other, in which they are of *flowing* character.* Nor is this distinction the only one which exists between these two classes of Windows.

We shall find, if we examine further, that they differ also materially in other respects; in their mouldings and plan, as well as in their sculpture and ornaments. We shall find, in fact, whether we consider the general design or the detail, that the points of difference which distinguish Perpendicular Windows from Decorated Windows, are not

* These terms "geometrical" and "flowing" are used here in the same sense as that in which they were used by Mr. Rickman, and are still used in most of the publications of the present day.

greater than those which separate these two classes of Decorated Windows from one another.

We have only to carry our inquiries a step further, in order to satisfy ourselves that these points of difference are not confined to the Windows alone, but extend also to the buildings to which these Windows respectively belong; and having arrived at this point, we shall not be long in coming to the conclusion that there exists a large and important class of buildings, characterized by the Geometrical forms of their Window tracery, which has hitherto been treated as belonging partly to the Early English and partly to the Decorated Styles, but which is, in reality, distinct from both, and pre-eminently entitled, from the number and beauty of its examples, to separate classification.

Instead, therefore, of following Mr. Rickman's division of Traceried Windows into two classes, DECORATED and PERPENDICULAR, I propose to divide them into three; in the first and earliest of which the leading lines of the tracery are generally *circular;* in the second, *flowing;* and in the third, *straight.*

To retain the term *Decorated* for the second of these classes would tend to confusion; as it at present embraces a portion of the first, and has been so long applied to so many buildings of this character, that it would be very difficult, if not impossible, to limit its future signification to the extent and in the manner required. Moreover, it was adopted by Mr. Rickman as a fit term to express the contrast between the rich head of a mullioned Window, and

the plain lancet-head of his earlier style; a contrast which cannot be said to exist to the same extent between *circular* and *flowing* tracery.

Neither does it appear necessary or desirable to retain the term *Perpendicular* for the third style, if one more correctly expressive of the character of the tracery of this Period can be found.

I propose, then, to name these three styles of Window tracery, GEOMETRICAL, CURVILINEAR, and RECTILINEAR; and to allot the following periods to them:—

	A.D.	A.D.
GEOMETRICAL .	1245 —	1315.
CURVILINEAR .	1315 —	1360.
RECTILINEAR .	1360 —	1500. *

* The terms "Curvilinear" and "Rectilinear" were many years ago proposed by a writer in the "British Critic" (vol. ii. p. 378), to be substituted for Mr. Rickman's "Decorated" and "Perpendicular."

CHAPTER III.

ORIGIN OF TRACERY.

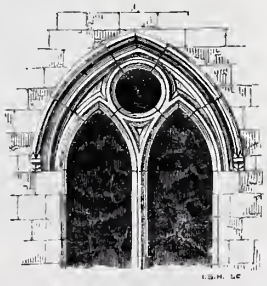
SECTION I.

THE CIRCLE CARRIED BY TWO ARCHES.

THE elemental principle of the design of by far the greater number of the earliest Traceried Windows is that of a circle carried by two pointed arches.

This feature, or some modification of it, is found throughout the whole of the Geometrical Period, and is not entirely lost sight of in many of the most beautiful examples of the Curvilinear Period.

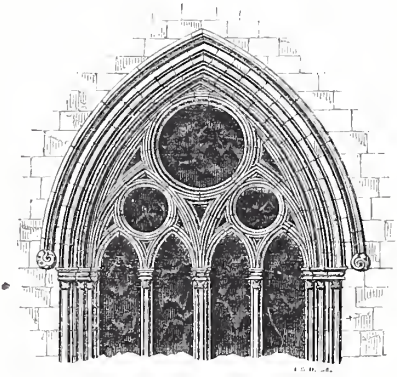
The two-light Window of the aisles of Etton Church, Northamptonshire, presents the simplest form, where both the arches and circle are perfectly plain.



ETTON.

The four-light Windows in the north aisle of Grantham Church, and those of Westminster Chapter House (No. 7),

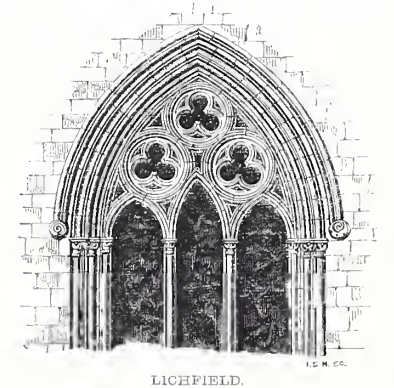
Netley (No. 8), Howden (No. 14), Rudston (No. 6), and Leominster (No. 21), exhibit the application of this principle on a larger scale. In all these examples the simple two-light form is merely *doubled*, in order to produce the larger Window.



GRANTHAM.

The magnificent eight-light East Window of Lincoln Cathedral (No. 11), in which the original two-light is *quadrupled*, is a remarkable example of the same kind.

In three-light Windows the head of the Window is usually filled with three circles of nearly equal size; as in the plain three-light Window of Bourne Church (No. 3), and in the aisle Windows of Lichfield Cathedral, to which the large six-light Windows of Raunds (No. 9), and Grantham (No. 10), bear the same relation that the East Window of Lincoln does to the four-light Windows before mentioned.



LICHFIELD.

The mode in which this principle is applied to five-light Windows, may be seen in the Windows of Bedale (No. 13), Easby (No. 18), Wellingborough (No. 35), and Fishtoft (No. 25), and in the numerous fine five-light Windows of the Choir of Exeter Cathedral.

Ripon Cathedral contains a noble seven-light Window of this kind (No. 16), which is still surpassed by the larger and more striking East Window of Guisborough Abbey, of very similar design (No. 17).

Throughout the whole of these examples, varied as they are in detail, we readily recognize the elemental principle before mentioned, as the one upon which their general outline has been designed.

In considering, then, the origin of Tracery, the derivation of its earliest and most essential feature, that of *a Circle carried by Two Arches*, naturally becomes the object of our first inquiries.

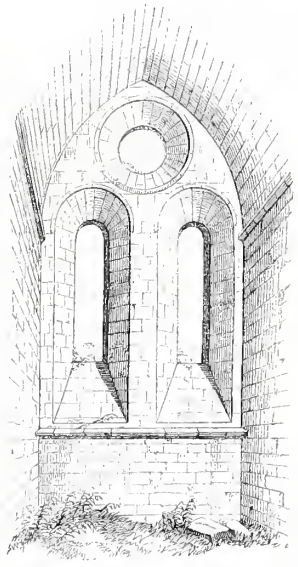
In the Norman Style a single broad circular-headed Window was the one usually employed.

As the style advanced, the proportions of this single Window became altered, its height being increased, and its relative width diminished.

Circular Windows also were not uncommon in this style; but in the Transitional Period they began to be of frequent occurrence. They were sometimes of large proportions, and occupied the entire gable, as in the west ends of Byland and Kirkstall Abbey Churches; occasionally they were

ornamented with small arches, resting on shafts radiating from the centre; but frequently they were small and plain, and used in a manner which exhibited a connexion with, or a reference to, the other openings.

They appear thus in the transepts of Durham, at the east end of St. Cross, near Winchester, and in the ends of the transepts of Kirkstall and Fountains.



KIRKSTALL.

It is in the eastern chapels, however, of the transepts of Fountains and Kirkstall Abbey Churches (two buildings strongly resembling one another), that the use of the circular Window in connexion with the plain circular headed Window of the Transitional Period, is more particularly deserving of notice.

There are two of these chapels attached to the east side of both the transepts; they are vaulted with a plain pointed barrel vault, and are lighted at the east end with a plain circular Window, over two plain circular-headed Windows.

The relation which these three openings bear

to one another, and to the space in which they are situated, is too evident to permit us to doubt that in this arrangement we have the type of the elemental principle of Geometrical Tracery before mentioned, and one of the earliest examples of *a Circle carried by Two Arches.*

The conventual Church at Kirkstall was completed A.D. 1152; and Westminster Abbey Church, the first building in England of authentic date in which Window Tracery, properly so called, was used, was commenced A.D. 1245.

We have thus an entire century intervening between the first appearance of this feature and the introduction of the art to which it eventually gave rise.

The manner in which this interval was filled up requires to be briefly noticed.

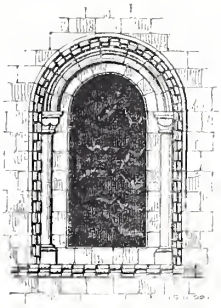
SECTION II.

THE COMBINATION OF LANCETS UNDER ONE ARCH.

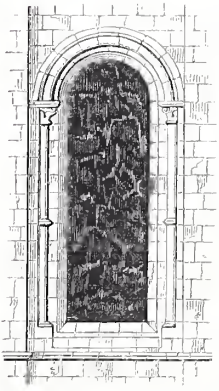
THERE are few circumstances in the History of Architecture more deserving of attention than the rapid and remarkable changes of form through which the Window passed between the 11th and 14th centuries; and it is on this account that it may be taken more readily than any other prominent feature of a building to denote its age and character.

Rapid as was the reduction in width, and increase

SOUTHWELL.



ELY.



BYLAND.

in height, from the low, broad, circular-headed examples of the 11th century, to the long, narrow lancet of the 13th century; still more remarkable was its sudden expansion from the latter form into the spacious examples of the same century.

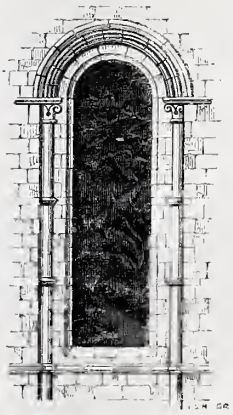
A few instances will illustrate the nature and progress of the earlier of these changes.

We first find the low, broad Early Norman Window of Southwell and Durham brought to the fairer proportions of Ely and Peterborough.

The Windows of Malmsbury, Fountains, and Kirkstall exhibit the progress of this elongation in the early part of the Transitional Period, and those of Roche and Byland its continuation in the latter part of the same period.

In the extreme eastern portion of the choir of Canterbury Cathedral, and in the nave of Glastonbury Abbey Church, we find the approximation to the Lancet form still

more close; and in both these buildings pointed and circular arches are used indifferently in the window heads.



CANTERBURY.

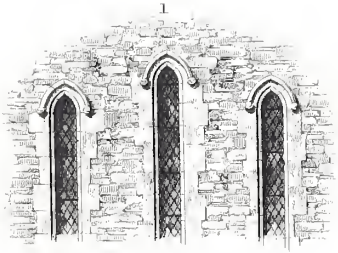
The earliest Lancet Windows still exhibit a considerable breadth of glass; which became, however, almost immediately greatly diminished in proportion to their height.

To such an extent was this reduction carried in some instances, that the Window became a narrow strip of glass, the breadth of which bore no estimable proportion to its height. Thus, in the chancel of Bottesford Church, Lincolnshire, the side Windows are fifteen feet six inches in height, and only eight inches in width.

Thus reduced in width, and diminished, as their transparency often was, by the stained glass with which they were filled, single Windows soon proved to be insufficient to afford the requisite amount of light, and it became necessary to compensate by a combination of several openings for the deficiency thus occasioned.

This combination was effected in the earlier instances by simply placing two or more Lancet Windows in juxtaposition; the number of the Windows so combined varying with the size of the compartment to be lighted; thus, while we find couplets of lancets in the compartments of the side aisles, we

1



BOTTESFORD

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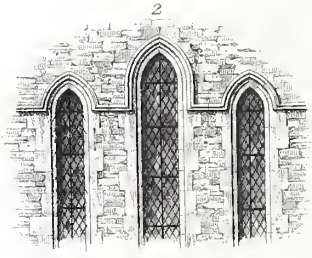

ST BARTHOLOMEWS HOSPITAL.
Sandwich.

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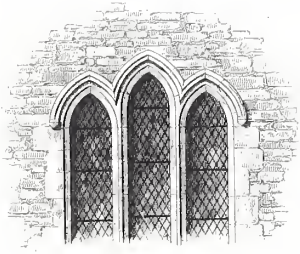

COWLEY

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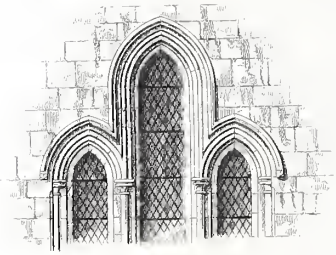
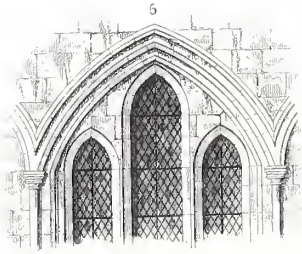


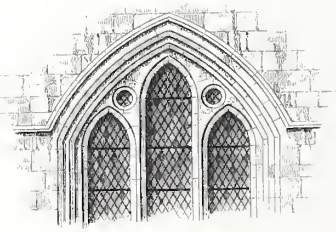
TEMPLE CHURCH

5



CARLISLE

6



CARLISLE

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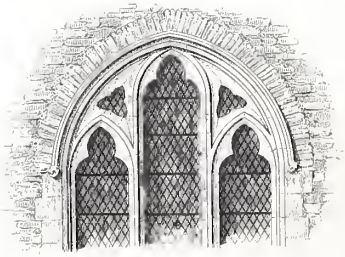


NETLEY

8

EASBY

blished, by carrying a continuous hood-moulding over the whole group, and by lessening the mural space between them; as in the east end of St. Bartholomew's, Sandwich (Fig. 2).

In the succeeding examples (Figs. 3 and 4) the wall space between the lights is so far reduced as to come under the denomination of a mullion.

The unity of Design suggested by the last group becomes strikingly apparent in the two next examples from the south transept of Carlisle Cathedral (Figs. 5 and 6), in which the three Lancets are united under one Arch.

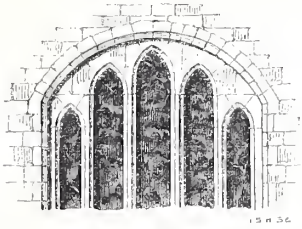
A further advance of no small importance is also exhibited in Fig. 6, in which the space that intervenes between the heads of the Lancets and the Arch is pierced with a small circle.

It only remained that this perforation should be complete, and designed so as to occupy the whole of this intervening space, in order to convert what had hitherto been a group of separate Windows into one Window of several lights: as shewn in the two last examples from Netley and Easby Abbey Churches (Figs. 7 and 8).

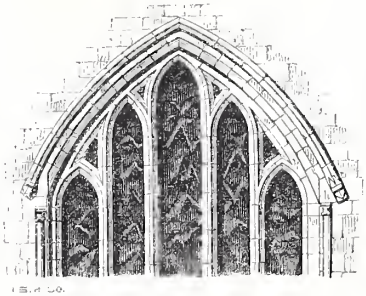
This step, which would appear to be little more than the completion of the preceding one, was in fact the consummation of the change which had been thus gradually carried on, and the commencement of a new era in the art of constructing Windows.

All that has just been remarked in regard to Windows of three lights applies equally to the larger groups, which generally occupy the gable-

ends. The collection of five lancets under one arch at the east end of the old Guildhall at Chichester shews the same progress in the last stage but one, and the east Window of Etton Church shews the perforation in the Window-head complete. The former being *a group of five Lancets,* and the latter *a Lancet Window of five lights.*



GUILDHALL, CHICHESTER.

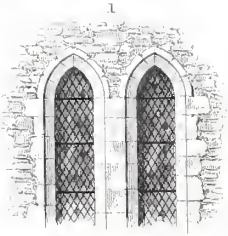


ETTON.

Whilst this progress was going on in the gable-ends of buildings, a contemporaneous change, not less important, but of a somewhat different nature, was being carried on in the side-walls.

In the churches of this period, the high pitch of the roofs, increasing, as it did, the loftiness of the principal front, necessarily subdued and kept down the height of the side-walls. Whilst, therefore, the number and height of the Lancet Windows lighting the east and west fronts and the transept ends of the so-called Early English Period, is one of the most striking and characteristic features of the style, the unpretending and subordinate character of the

1



St Giles, Oxford

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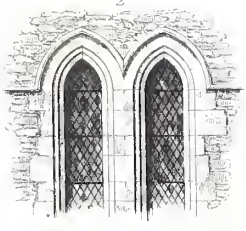

St Giles, Oxford

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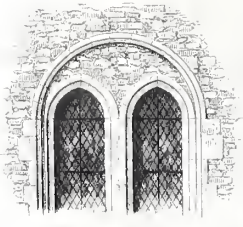

Netley

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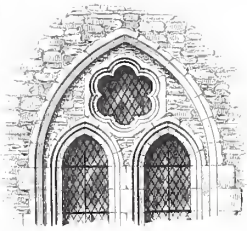
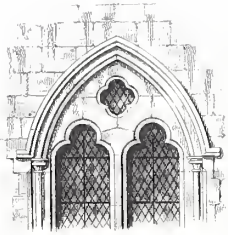


Netley
Chapter House

5

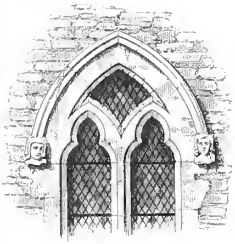


Winchester
County Hall

6

St Cross
N Porch

7



Grasby

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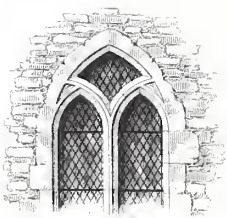
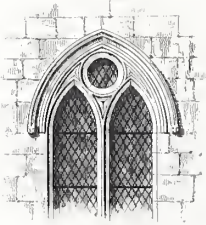


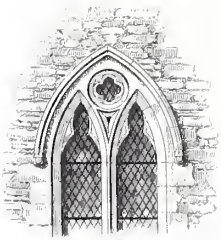
Dowsby

9



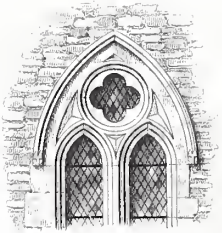
Etton

10



Scotton

11



Charlton-on-Otmoor

12

Chiselbourne

ORIGIN OF TRACERY

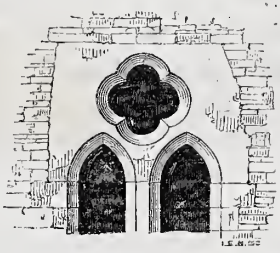
Illustrated by a series of [illegible]

London, Published by John Van Voorst, Paternoster Row, 18[illegible]

side-aisle and clerestory Windows is equally remarkable.*

Used singly in the earlier instances, and in couplets and triplets in the later examples, we rarely find the latter number exceeded in the compartments of the side aisles.

Here the progress we have been tracing through the larger groups was differently exhibited.



LILLINGTON.

It was in the side aisles that the practice of pairing Windows, and perforating the wall above them with a circular, or other opening, an early example of which we have recorded in the first section of this chapter, found a ready acceptance.

Following at first the same course in the dual arrangement as in the case of a plurality of Lancets, we find them first placed in juxtaposition (Plate B., Fig. 1); next, united by a continuous hood-moulding (Fig. 2); and subsequently in a similar manner combined under one arch (Fig. 3). But here an anomaly arose, which had no existence in the larger groups, where the heads of the lancets rising above

* These churches were, in fact, principally lighted from their extreme ends ; or, in other words, from the head, the feet, and the arms of the cross ; and this circumstance, and the necessity, in fact, which existed for this extraordinary supply of light from the *extremities* of the building may, in some degree, account for the prevalence of Transeptal Churches, in this style.

one another within the arch itself filled it so nearly as to leave but little space for further perforation.

In two-light Windows, on the other hand, a considerable space was left between the heads of the lights and the circumscribing arch, which presented an opportunity that was not likely to be neglected by the architects of this Period.

We accordingly find this space perforated in a variety of ways, as exhibited in the remaining examples given in Plate B.

The first three, Netley, Winchester, and St. Cross, shew simply a foiled opening placed under the arch, over two lancets or two trefoiled lights.

The two next, Grasby and Dousby, shew awkward and incipient attempts to adapt the shape of the perforation to the form of the arch.

The two last, Charlton-on-Ottmoor and Chiselbourne, exhibit the whole arch filled with a consistent design, containing a foliated circle carried by two lancets.

It was thus, then, by the joint operation of these two important results, namely, *the conversion of a group of Lancets into One Window of many lights*, and *the combination of a Circle and Two Lancets under One Arch*, that the way was prepared for the approaching change.

CHAPTER IV.

DEFINITION OF TRACERY.

A WINDOW cannot be said to contain *Tracery* unless the whole of the Window-head is pierced through to the plane of the glass, so as to leave no plain surface, or solid mass of stone, in the spandrels between the principal Tracery-bars and the Window-arch.

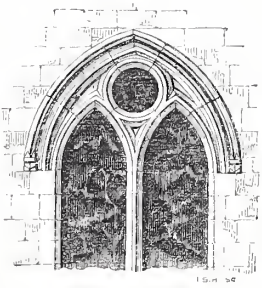
This rule, which is nearly identical with that laid down by Professor Willis in the sixth chapter of his "Remarks on the Architecture of the Middle Ages," contains a definition of Tracery that is at once simple and obvious, and enables us to class the Windows of this Period upon an intelligible principle.

It has been seen in the preceding section that before Lancet Windows were entirely abandoned, they were used in combination in such a manner as to present the appearance of their being a single Window of many lights; and that, in the case of Lancet Windows of two lights, the manner in which the Window-head is treated, almost gives the appearance of Tracery.

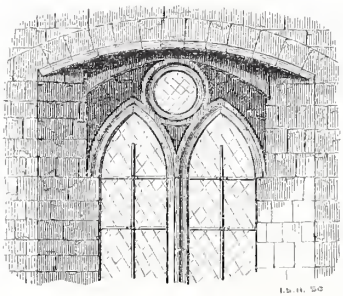
In many of these latter cases, the approach to actual Tracery is so close as to lead to the supposition at first sight that the Window is one of Early

Geometrical character: the application, however, of the rule just laid down is sufficient to determine the true nature of the design. Thus, in Etton Church, the Windows of the nave would appear at first sight, and as seen from the *outside*, to have reached the point indicated by the foregoing rules, and to contain actual Tracery.

ETTON.



(Outside.)



(Inside.)

When seen, however, from the *inside*, their real construction becomes evident, and they appear on this side to be, what in reality they are, Lancet Windows of two lights, with a plain circle over them under one arch. The sunk work in the spandrels on the outside is merely superficial, the perforation is incomplete, and the true principle of Tracery is therefore wanting.

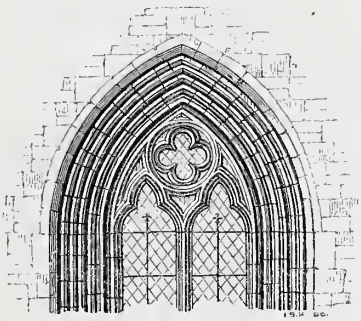
In a Window of Woodstock Church a similar instance occurs; here, however, the case is reversed; it is on the inside, in this example, that the approach is made; but the attempt equally falls short, the principle is again just missed, and the outside

still exhibits the double trefoil-headed Lancet, and the Circle.

It only remained, then, for these two attempts to meet each other in order to perfect the discovery, as in the aisle of Stone Church, where the perforation is complete.

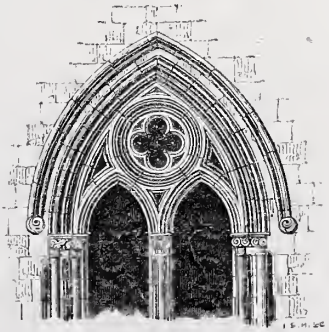
A Window cannot, however, be said to contain Tracery in which the foregoing condition is complied with simply by piercing the spaces that lie between the heads of three or more Lancets united under one arch, as in the East Window of Etton Church (see page 18), or

WOODSTOCK.



(Inside.)

(Outside.)



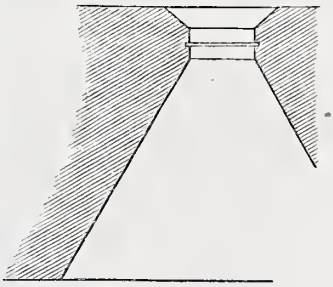
STONE.

the East Window of Easby Church (Fig. 6, Plate A.), the term conveys something more than the mere vertical continuation of the mullions above the spring of the Window-arch, and their termination in Lancets in the head of that arch; it necessarily implies the existence of a consistent design of perforation commencing at the spring of the arch, and occupying the entire Window-head.

CHAPTER V.

I. THE WINDOW-ARCH. — II. THE SCOINSON-ARCH.
III. THE REAR-VAULT.

1. *The Window-Arch.*—In Lancet Windows the glass was usually placed near the outside of the wall, which was deeply splayed from the glass inwards, to facilitate the admission of light.



BOTTESFORD.

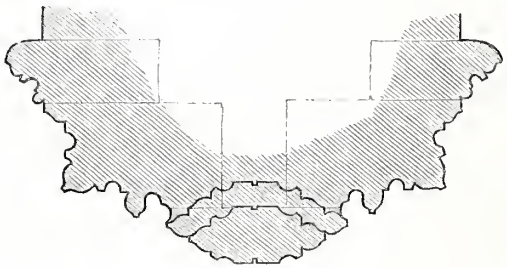
The combination of many lancets recessed under one Arch, whilst it necessarily brought the glass nearer the centre of the wall, introduced a new feature, the treatment of which soon rendered it an important one in the designs of Windows of this period.

In the earlier examples we often find this circumscribing Arch without mouldings or ornaments. As the style advances its importance increases; it is furnished with shafts and mouldings; it is enriched with running ornaments, foliage, and sculpture; and eventually becomes the deeply-moulded

frame, in which the rich *panel* of the Tracery is appropriately set.

This Arch may with propriety be called the WINDOW-ARCH.

In Windows of Curvilinear character the mouldings of this Arch are usually the same on the inside



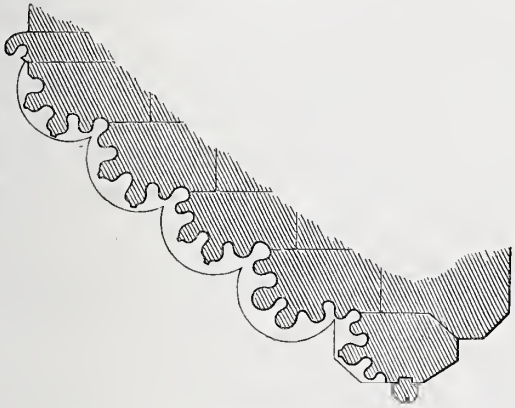
SLEAFORD.

as on the outside, and the Tracery is placed exactly in the centre of the wall: in Geometrical Windows, however, this is rarely the case.

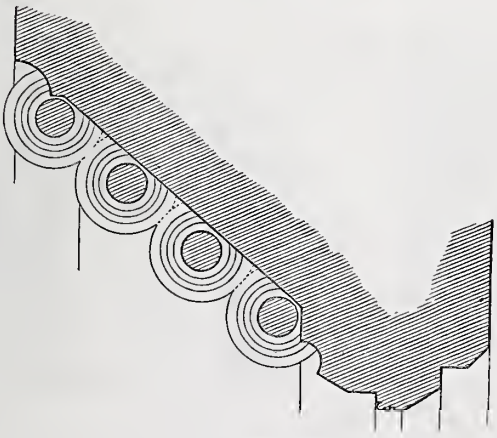
In many early examples, the practice of placing the glass as near the outside as possible is still retained, as in the east Window of Netley Abbey (No. 8), and the east Window of the north aisle of Stone Church. In the former example, the Tracery lies on the very surface of the outer wall, and the Window-Arch, which lies wholly on the inside, consists of a rich series of mouldings of four orders, carried on a like number of detached banded shafts, placed on the face of a deep splay.

By far the greater number, however, of Traceried Windows possess a distinct and well-defined Win-

dow-Arch, which exhibits itself on the outside as well as on the inside, the mouldings of which,



NETLEY WINDOW-ARCH.



NETLEY JAMB.

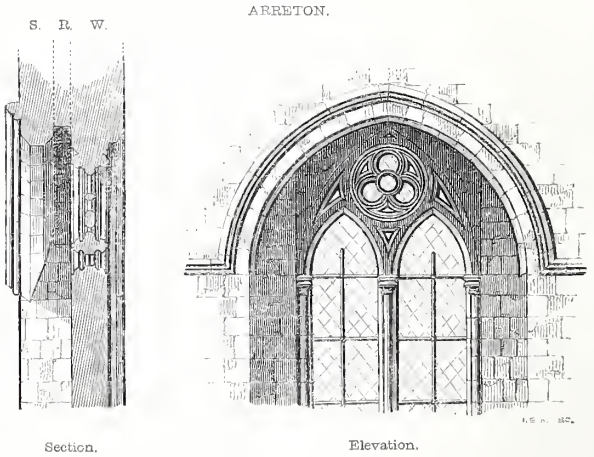
associated and blended, as they usually are, with those of the Tracery, are still easily to be separated and distinguished from the latter and have

a subordination of their own entirely independent of that of the Tracery.

II. *The Scoinson-Arch.*—In Windows which are placed in walls of considerable thickness, or where the Tracery lies near the outer surface, as in most early examples, there frequently occurs an arch which is not to be confounded with the Window-Arch, the treatment of which in both early and late work is worthy of especial notice.

The object of this Arch, to which Professor Willis was the first to call attention, and which he has named the SCOINSON-ARCH,* appears to have been twofold.

Almost all walls of mediæval character were built



Section. Elevation.

with an inner and outer facing of dressed stone, the middle being filled in with rubble-work and

* From the French term *Escoïnson.* See Willis, &c.

grouting, as the work proceeded. One of the purposes for which the Scoinson-Arch was used, was to carry the *inner* face of such walls, the *outer* face being carried by the Window-Arch.

Again, it is clear that for the better admission of light, it is desirable that the window side, or jamb, should be splayed on the inside as much as possible: the continuance of this splay round the head of the Window on the inside, not only produces an unsightly effect, but raises the Window to an inconvenient height. The Scoinson-Arch, springing, as it frequently does, from the same level as the Window-Arch, and rising only to the same height, at once obviates both these difficulties, and affords an elegant finish to the edge of this internal splay.

It often consists simply of a plain chamfered rib, of segmental or obtusely-pointed form, which dies into the splay of the jamb on each side, as in Arreton Church.

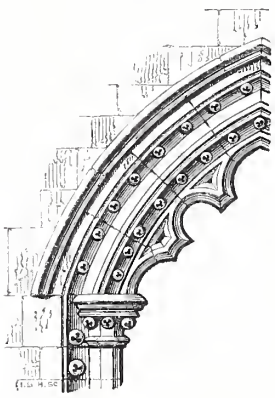
Sometimes this rib is carried by a single shaft, set in a hollow, as in Tintern (p. 31).

In other examples the mouldings are continued downwards, at the edge of the splay of the jamb, to the sill or string course at the bottom of the Window.

In the richer examples it becomes frequently equal in importance to the Window-Arch, and contains mouldings of two or more orders, and possesses its own hood-mould, as in the east Windows of the South Transept of Ely Cathedral.

It is less common in the Curvilinear than in

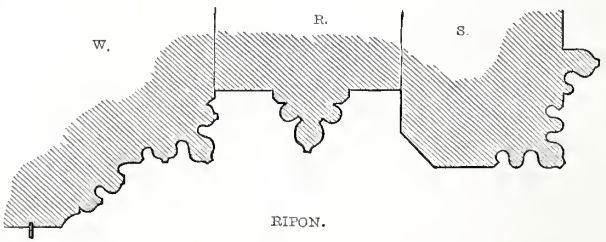
the Geometrical Period, but is occasionally richly ornamented with foliation in this period, as in Broughton Church, Oxfordshire, and in a Window in the east wall of the triforium of the south aisle of Gloucester Cathedral.



GLOUCESTER.

It occurs also in those Windows which are placed in walls containing galleries or passages, such as clerestory Windows, and large east and west Windows.

III. *Rear-Vault.*—Between the Window-Arch and the Scoinson-Arch there usually occurs a vaulted space, to which Professor Willis has given the name of REAR-VAULT.* This Arch or Vault is



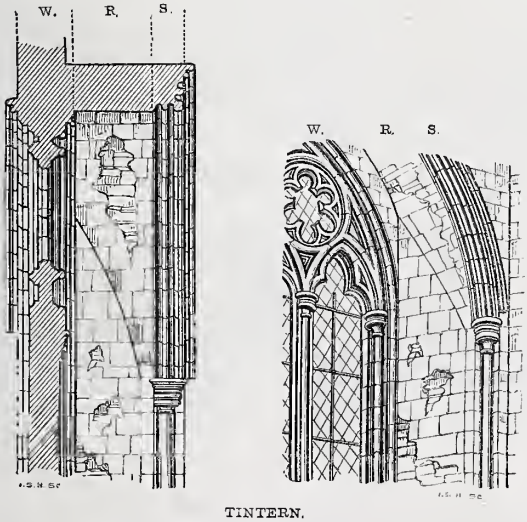
RIPON.

usually perfectly plain, as in Arreton (p. 28), and Tintern (p. 31); but it is sometimes ornamented, as in the east Window of Ripon Cathedral, where a deep rib of good profile is laid on its surface,

* From the old French term of *Arriere-vousse.*

between the Window-Arch and the Scoinson-Arch, which dies into the jamb at the spring of the vault.

Much ingenuity is often shewn in the manner in which these three members of the head of a Traceried Window are respectively arranged and united with its lower part and with one another; and the subject is one which deserves more attention and study than is usually bestowed upon it.



TINTERN.

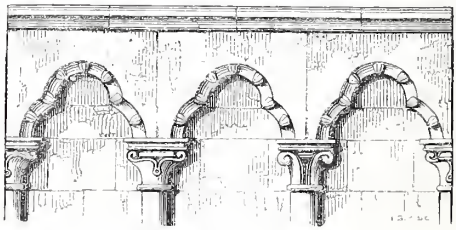
The side Windows of Tintern Abbey Church present good examples of the relative position and importance of the Window-Arch (W), the Scoinson-Arch (S), and the Rear-Vault (R), in Windows of Geometrical character.

CHAPTER VI.

FOLIATION.

The practice of *foiling* Arches, as described by Professor Willis,* arose in England at the close of the Transitional Period.

An early instance of a *trefoiled* Arcade occurs in



SELBY.

the West front of Selby Abbey Church; and of a *quatrefoiled* circle in the Triforium of Jedburgh Abbey Church, where the blank space over the double arches of the Triforium is pierced alternately with a plain circle, and a quatrefoiled circle. Both these examples belong to the Transitional Period.

This mode of ornamenting blank spaces soon came

* "Architecture of the Middle Ages," p. 41.

into rapid and universal use. The West front of Lincoln, Peterborough, Wells, and Salisbury Cathedrals are covered with trefoiled arcades: it became, in fact, the characteristic ornament of the Period.

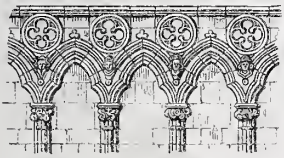
It was this species of decoration, used so profusely in the works of the so-called Early English Period, that gave rise to the art of FOLIATION,* as practised in the Windows of the succeeding Period.

Foliation preceded the introduction of Tracery; it is found in the heads of Lancet Windows at the close of the Period, and is a certain indication of late work. In the earliest examples the Foliation is

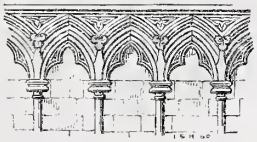
* The difference between *foiling* an arch and *foliating* it, is thus described by Professor Willis in his "Remarks on the Architecture of the Middle Ages," p. 45 :—

"In the first case the arch itself is indented into a number of small arches; in the second case, such a foiled arch is placed below it."

Thus the series of small arches in the accompanying arcade from the



WHITBY



ST. ALBAN'S.

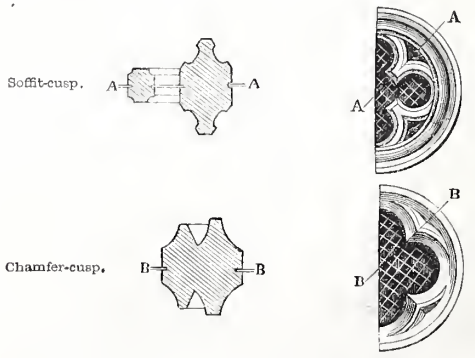
North Transept of Whitby Abbey Church are *trefoiled*; whilst those in the subsequent example, from the choir of St. Alban's are *trifoliated*.

Again, the next figure is a *quatrefoil*, and the following one a *quatrefoliated* circle.

usually formed by the addition of a small plain *cusp* to the soffit of the Window-Arch, as in Rudston (No. 6).

This description of cusp, which consists usually of a small piece of stonework, flat on both sides, and square or chamfered slightly on its edge, has been called by Mr. Paley* a *soffit-cusp*, to distinguish it from that cusp which is formed by the foliated continuation of the whole or part of the small hollow chamfer of the mullion or jamb adjoining the soffit, and the soffit itself, and which he has called a *chamfer-cusp*.

There is a striking analogy between the treatment of the unpierced Window-head and the solid soffit-cusp of the Lancet Period. Just as the solid spandrels in the Window-heads were perforated in order to produce tracery, so was the plain cusp pierced through to the plane of the glass, and reduced to the condition of a slender bar of stone, apparently laid on the soffit of the small arch or tracery-bar to which it was attached.



* "Manual of Gothic Moldings." Van Voorst. London, 1847.

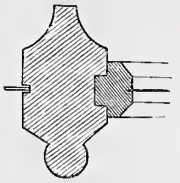
This *soffit-cusp* pierced, became the characteristic cusp of the Geometrical Period.

Generally this cusp is plain, with a small chamfer on one or both of its edges, but in richer examples it is often elegantly moulded, with a different profile on each side, as in the arcade of the aisle of the Presbytery of Lincoln Cathedral.

LINCOLN PRESBYTERY.

The small triangular space between the cusp and the small arch or tracery-bar to which it belongs, whether solid, sunk, or pierced, has been called by Professor Willis* the *foliating space*, and by common masons, where only sunk, an *eye*.

One effect of thus piercing the solid soffit-cusp was to cause it to be treated, in its altered form, as a separate and distinct member. Thus in almost all the larger, and in many of the smaller foliated circles of the Geometrical Period, the cusps were inserted in a groove cut in the soffit of the circle, and are not, as they appear to be, cut out of the solid.



It would not be difficult in a circle to keep these inserted cusps in their places, but in the head of a light this would not be so easy; hence it is by no means uncommon to find these two descriptions of soffit-cusp united in the same Window in the Early Geometrical Period: the solid soffit-cusp being used

* "Architecture of the Middle Ages," p. 45.

in the heads of the lights, and the inserted cusp in the foliated circles;* and to the same circumstance is to be attributed the fact that many Early Geometrical Windows appear to have been designed with plain circles, and foliated lights, whereas in reality, owing to decay, the neglect of churchwardens, and ignorant repairs, the original cusps of these circles, have either slipped out of their grooves, or been cast aside as offering an unnecessary difficulty to the glazier, and the grooves filled up with plaster or cement.

Soffit-cusps continued in use throughout the whole of the Geometrical Period, but are rarely, if ever, to be found in Curvilinear Windows.

Chamfer-cusps appeared as early as the Lancet Period; they are common in Geometrical Windows, but were almost exclusively used in the Curvilinear Period.

The earlier chamfer-cusps are distinguishable from the later ones in their having a plane surface on the chamfer, whilst in the later examples the chamfer is usually hollowed.

They are used, almost without any variation,

* This has been satisfactorily ascertained by Mr. Scott to be the case in the east Window of Raunds Church (No. 9), in which the cusps of the circles have slipped out, and the groove has been filled up, whilst those of the lights, being solid, have remained. The Window is shewn in the accompanying series in its present state.

In the north aisle of the nave of Chichester Cathedral, the whole of the circles in the Early Geometrical three-light Windows have suffered a similar loss, and are at the present time undergoing a correct restoration by Mr. Carpenter.

throughout the Curvilinear Period, alike in the richest as in the plainest Windows.

The foliating space is usually small, and the back of the cusp convex.

The plane of the fillet or edge of the cusp is generally a little below that of the adjoining fillet of the mullion or tracery-bar.*

* The hollow chamfer-cusp is the one almost invariably used in modern practice, as well in windows of Geometrical as in those of Curvilinear design. It is almost needless to observe, that any attempt to carry out a Geometrical outline with Curvilinear details must end in a failure.

There is, perhaps, no Period of English Architecture in which so much attention was paid to niceties of detail as the Geometrical, or one in which the absence of care in this respect in modern imitation exhibits a greater departure from the spirit of the style.

CHAPTER VII.

THE MOULDINGS OF DECORATED WINDOWS.

SECTION I.

SUBORDINATION.

Sir James Hall was the first who noticed the subordination of Mouldings in Traceried Windows.* Mr. Rickman alludes to it,† and Professor Willis has enlarged upon it in the sixth Chapter of his "Architecture of the Middle Ages." He endeavours there to prove the derivation of Tracery through the practice of *foiling* arches from the earlier practice of constructing compound arches, one under the other, of different forms. The whole of this chapter, as well as the whole work, deserves the careful study of all who are curious on this subject, or are interested in the architecture of these Periods.

Ingenious, however, as is the manner in which this view is there treated, and well supported, as it appears to be by the foreign examples which are cited, it is extremely doubtful how far it may be said to be applicable to the case of English Tracery;

* "Essay on Gothic Architecture."

† "Attempt to discriminate," &c. Third edition, p. 74.

the origin of which is so simply and naturally to be accounted for in the manner already explained. (Chapter III.)

The fact is, that in the period immediately preceding that in which Tracery made its appearance, the principal idea which seemed to possess the builders in their treatment of Windows, was that of *combination;* and in the earlier instances that combination was marked as frequently by a simple hood-moulding, lying on the surface of the wall, as by a recessed Arch;* nor, where the Window-Arch was thus used, was it of that depth, or the relation of the lights to it of such a nature as to suggest the idea of *subarcuation.* In fact, from the moment that groups of Lancets ceased to be separate features, and became so many members of one large Window, the whole of the stonework within the Window-Arch began to be treated as one large *panel,* the component parts of which, although possessing, as they often do, a subordination of their own, are not to be looked upon as entering into a system of subordination of which the Window-Arch forms a part.

This view of the nature of a Traceried Window becomes confirmed when we examine its *construction;* it is at first sight apparent that the only real Arch of Construction, except where a Rear-Vault and Scoinson-Arch occur, is the Window-Arch; the Tracery and mullions having been almost invariably set after the Window-Arch was completed,† and

* Oundle Church, seven lights.

† This practice, the exceptions to which in ancient work are ex-

being evidently designed to fill the vacant space, and to carry only their own weight;* a fact which is incompatible with the idea of the Tracery or any portion of its Mouldings being a sub-arch to the order above it; inasmuch as in all systems of sub-arcuation the sub-arch is the one first constructed, on the back of which the others are built.

Following out the principle on which he derives the construction of Traceried Windows, from the practice of constructing consecutive, subordinate arches, and which has led him to regard the Tracery itself as a portion of such a series, Professor Willis, in his classification of the different orders of Mouldings in a Traceried Window, constitutes the Window-Arch the first, and the Foliation the last of the series.†

Hence it follows, that the first order of the Mouldings of the Tracery becomes in fact the *second* order of the Mouldings of the Window; an inconvenience the amount of which, in describing the Window, will be found to be considerable. Again, it frequently happens that the Window-Arch itself contains two orders of Mouldings; so that the first order of the Tracery will not always necessarily be the second, but may sometimes be the third, or even

tremely rare, is very often transgressed in modern work ; it is, in fact, not uncommon to see a considerable portion of the mouldings of the Window-Arch worked together with those of the tracery on the same stone.

It is in vain for us to hope to seize the spirit of early models, if we content ourselves with copying their *decorative* features, and neglect the principles of their *construction*.

* The Tracery may, in fact, be said to bear pretty much the same relation to the Window-Arch that the glass does to the Tracery.

† "Architecture of the Middle Ages," p. 55.

the fourth order of the Mouldings of the Window. These difficulties are increased where, as is often the case, the Foliation contains two orders of Mouldings, and the total number becomes thus increased to six or seven orders.

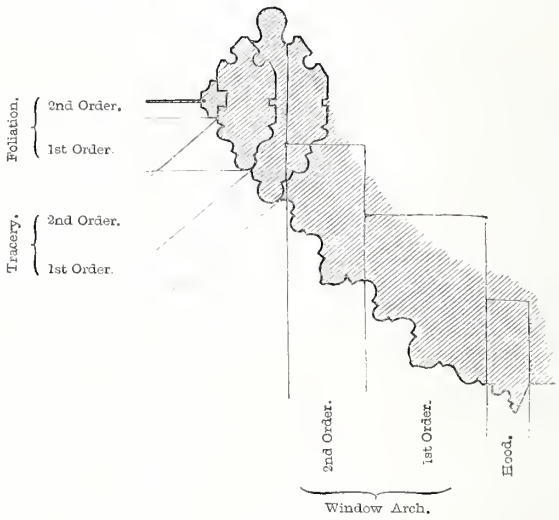
On the other hand, if we adopt that principle which leads us to regard the Window-Arch as the *frame*, and the Tracery as the *panel* of the Window, and class their respective Mouldings, as well as those of the Foliation separately, all difficulty of description vanishes, and the true relation and subordination of the parts is rendered distinct and intelligible.

According to this method of description, the Mouldings of the head of the west Window of Howden Collegiate Church, the elevation of which is given in the series (No. 27), and the plan of which is annexed, may be classed under three heads and thus described:—

The Window-Arch contains two orders of Mouldings; the Tracery has two orders of Mouldings; and the Foliation has also two orders, the first of which is identical with the second order of the Tracery, and the second of which is formed by soffit-cusps.

For the purpose of distinctly noting the different orders of Mouldings contained in a Window-head of this kind, the method of classing them, as shewn in this plan, will be found to be the most convenient, in which the Mouldings of the Window-Arch are limited by lines drawn at right angles to the wall, those of the Tracery by lines drawn diagonally, and

those of the Foliation by others drawn in the direction of the glass or parallel to the wall.

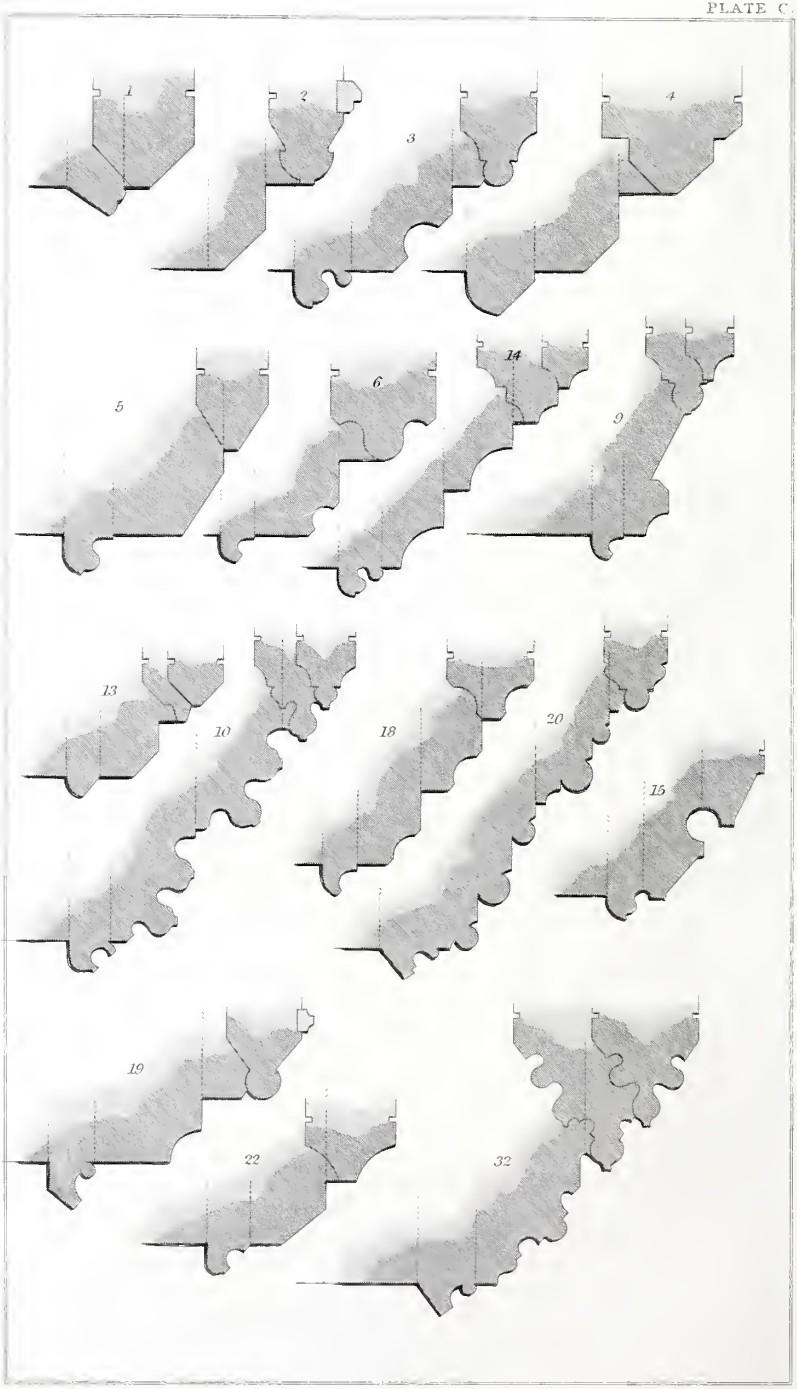


HOWDEN. WEST WINDOW.

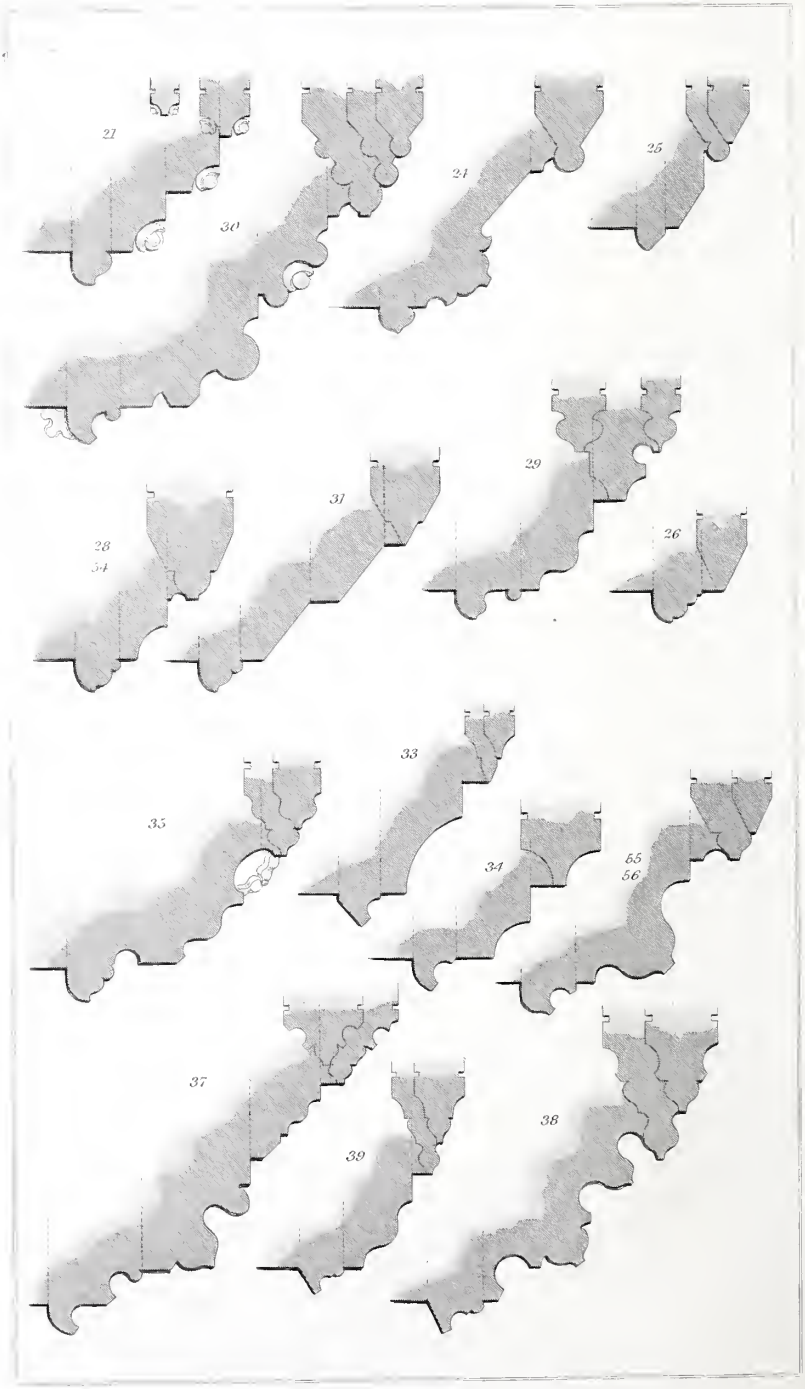
The plates C, D, and E, present the plans of the greater part of the Windows given in the accompanying series, and may be taken as representing sufficiently well the character of the Mouldings of the Geometrical and Curvilinear Periods respectively. The scale to which they are drawn differs throughout, for the convenience of arrangement; the object being rather to obtain a general synoptical view of the whole, than to give accurate detailed measurements of each.

On the first view that we take of these plates, the following points at once strike us.

1. The WINDOW-ARCH rarely contains more than



London, Published by John Van Voorst, Paternoster Row 1849.



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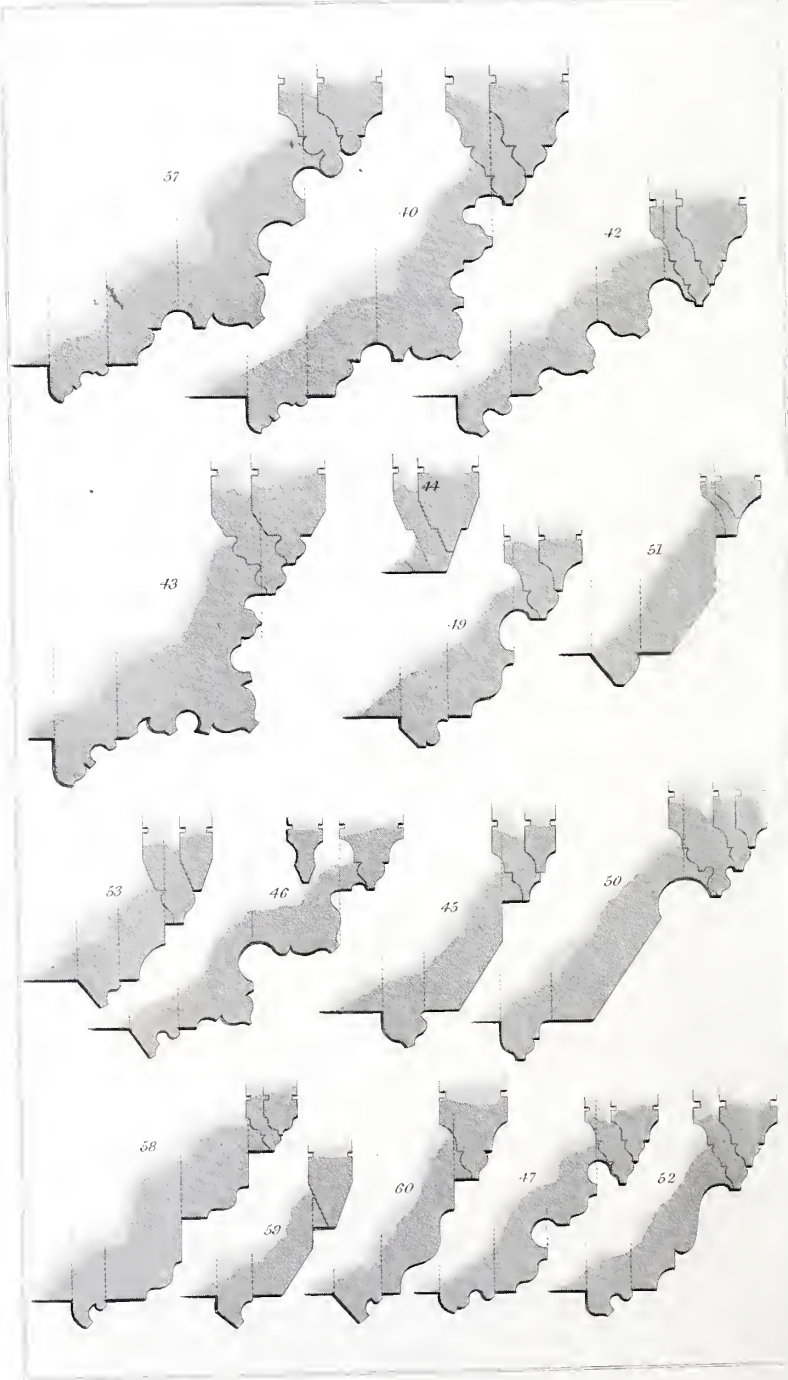


London. Published by John Van Voorst Paternoster Row. 1849.

two orders of Mouldings, and more frequently only one.

This remark applies as well to the larger Windows of this series, Carlisle, Lincoln, Selby, and Guisborough, as to the smaller ones. The east Window of Netley, it is true, has four orders in the Window-Arch, (see p. 27,) which, however, in this case, lies wholly on the inside, and is of very early and peculiar character.

The Window-Arch always comes down to within a few inches of the glass; the portion of stone on which the adjoining part of the Tracery is worked being seldom as thick even as the Mullion, and never having any additional Mouldings worked upon it, above the plane of the first order of the Tracery.

The mode in which the back joints between the Tracery and the Window-Arch, and between the different orders of the Window-Arch are provided for is worthy of notice.

In the accompanying plates these joints are shewn by dotted lines; and it will be seen that occasionally a small subsidiary Moulding, usually a hollow, intervenes between the first order of the Tracery and the soffit of the Window-Arch, the object of which is to give the necessary thickness to the stone on which the former is worked, as in Trent (No. 28), Wells (No. 30), Hedon (No. 55), Exeter (No. 24), and Nantwich (No. 46).

In many cases, however, the same object is attained by increasing the width of the fillet on the surface of the first order of the Tracery, which meets at right angles the soffit of the lowest order of

the Window-Arch, and thus forms a rectangular joint. This is the case in Arreton (No. 2), Howden (No. 14), Bedale (No. 13), Cartmel (No. 22), Milton (No. 31), Hull (No. 29), Great Bedwyn (No. 34), Carlisle (No. 37), Heckington (No. 39), Yaxley (No. 49), and numerous others.

Sometimes this fillet has its natural width, and a portion of the first Moulding of the Tracery bar is seen worked on both sides of it, as in Grantham (No. 10), Heckington (No. 38), Whitby (No. 32), and Boston (No. 47).

Again, where the Window-Arch contains two orders of Mouldings, the joint between them is usually placed where two plain surfaces, or fillets, meet each other at right angles, as in Grantham (No. 10), Howden (No. 20), and Carlisle (No. 37); in almost all other cases it is placed in a hollow, and generally at that point of the curve where a tangent, drawn parallel to the wall line, or at right angles to the joint, would touch it, as in Howden (p. 42), Nantwich (No. 46), Boston (No. 47).*

2. The TRACERY never contains more than three orders of Mouldings, and very rarely more than two.

This may be said of the largest and richest Windows in England; it is, indeed, possible to conceive a case where a quadruple series of Mouldings might exist, but if the principle of subordination practised in English Tracery were adopted, the design would of necessity contain not less than sixteen lights.

* The mode in which these parts of a Traceried Window are worked, and the joints provided for, involves great nicety, and is generally totally overlooked in modern work.

The number of Windows containing three orders in the Tracery is very small; there are only four in the accompanying series, namely, Lincoln eight lights (No. 11), Carlisle nine lights (No. 37), Northborough five lights (No. 50), and Wells four lights (No. 30); and of these, the third order in the two last is formed by cusp-tracery.

It will be seen on comparing the elevations in the series with the profiles, that the primary Mouldings are confined in the Geometrical Period generally to the two principal arches and the circle they carry; and where the number of lights is uneven, as in Ripon (No. 16), and Guisborough (No. 17), to the small subsidiary arch below the circle, forming the head of the central lights; and in the Curvilinear Period to the principal arches, the centre-piece and the Tracery-bars which connect them. The skeleton of the design being thus formed, the secondary Mouldings developed the principal forms of the Tracery, and defined the outline of the foliated figures.

The east Window of Carlisle (No. 37), may be taken as an example, the Tracery of which exhibits a design of perfect proportions, and well arranged subordination in three orders.

The *primary* Mouldings here are confined to the two principal arches, the oval-headed centre-piece between them, and the small circle over the central light, which form the principal features of the design. The *secondary* Mouldings define all the leading lines in the Tracery of the two side compartments as well as the principal openings in the

centre-piece; and the *tertiary* Mouldings complete the design by supplying all the intervals with foliated figures.

3. The FOLIATION never contains more than two orders, and generally only one.

The Mouldings of this part of a Window-head and their subordination, deserve more attention, and have obtained perhaps less, than any other part of a Traceried Window. This is particularly the case with regard to Geometrical Windows, which exhibit occasionally very singular combinations of this member, the nature and design of which are not very apparent at first sight.

Where two orders are used, it frequently happens that the first order is used in one part of a Window, and the second in another. This is the case in Early as well as Late Geometrical Windows.

Thus, in the Windows of the Chapter House at Westminster (No. 7), the roll Moulding, which forms the first order of the Tracery, forms also the quatrefoil over each of the two side compartments, whilst the large central circle, and the heads of the lights are foliated with soffit-cusps.

So, also, in the east Window of a chapel in Meopham Church,* the heads of the lights are trefoiled; the fillet which forms the trefoil being also the surface Moulding of the three circles in the Window-head, which contain a second order of inserted soffit-cusps.

In the east Window of the refectory of Easby Abbey (No. 18), the two orders are united in the

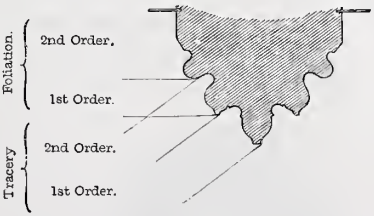
* "Brandon's Analysis." Sect. I. Plate 2.

same trefoil in the most singular manner, in the circular centre-piece; a small soffit-cusp being inserted at the base of each trefoil, the primary fillet forming the other two foils; the whole of the rest of the Foliation is formed by the secondary soffit-cusps.

EASBY.

In the east Window of Ripon Cathedral (No. 16), the first order of the Foliation which forms the trefoils of the centre-piece is, as in most other cases, identical with the second order of the Tracery, and the second order of the Foliation, which is formed by soffit-cusps, is employed throughout the rest of the Window.

So again, in the Late Geometrical Window in the north aisle of Whitby Abbey Church (No. 32), the trefoils exhibiting the first order of Foliation, which appear in the singular figure that constitutes the principal feature of the design, are formed by the second order of the Tracery, whilst the heads of the lights shew the second order of Foliation.

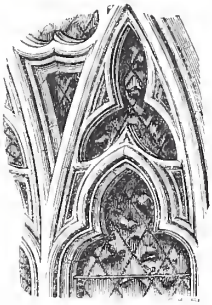


WHITBY.

In the aisle Windows of Howden Collegiate Church the same thing occurs, some parts of the

Foliation being worked with two orders, and other parts with only one.

We have now to notice those Windows in which the two orders of the Foliation are worked out separately in the same part of the Window; a practice which appeared in some of the later Geometrical Windows, and gave rise to that beautiful kind of double Foliation, which became so frequent and so rich an ornament of the Tracery and open work of the later Periods: it occurs in the west Window of Howden Collegiate Church (No. 27), which contains what is called, in the descriptive text, a *trifoliated quatrefoil.*



HOWDEN.

Both orders of the Foliation are here developed separately, the second order constituting the Foliation of the first order.

A precisely similar example occurs in the centre-piece of a Window in the tower of Trent Church (No. 28).

WELLINGBOROUGH.

In the east Window of Wellingborough Church (No. 35) appears a more advanced and very elegant example of double Foliation; and the canopied niche on the point of the gable indicates the early discovery of its applicability to open work.

It is in this form only that two orders of Foliation are ever used in Curvilinear Windows, and in this form only very rarely.

In fact, the Foliation of nearly all Curvilinear Windows consists of the plain chamfer-cusp of one order, sometimes flat, but commonly hollowed on the chamfer side; generally with an edge, but sometimes with a fillet, and even a small roll on its surface; usually convex at the back, and rarely pierced in the foliating space. This remark applies equally to the magnificent nine-light of Carlisle (No. 37), and the small two-light of Hedon (No. 56).

In the whole of the foregoing remarks, general rules only are attempted to be laid down on a subject to which little attention has hitherto been paid; anomalies and irregularities will frequently be met with, and occur indeed in many of the accompanying examples, involving an apparent departure from these rules; but the advantage of some systematic plan of viewing and classing the different parts of a Traceried Window, is too great to permit exceptions of this kind to prevail against such an attempt, and the improvements that may be made upon it from time to time by other inquirers.

SECTION II.

PROFILE.

The principal Mouldings of Traceried Windows are, I., those of the Jamb and Window-Arch; and II., those of the Mullion and Tracery-bars. To

these may be added the Mouldings of the Scoinson-Arch, the Hood-moulding, and the String-course, which, as consisting of one order only, may be looked upon as of secondary importance.

It has already been stated, that Geometrical and Curvilinear Windows differ no less in their Mouldings and details than in their general design. It has also been observed, that the outline of the general design of a Geometrical Window-head is formed of circles or segments of circles, whilst that of a Curvilinear Window is composed of lines of a flowing character. It will be seen on examination, although the ogee found its way first into the Profiles of Mouldings, that the same rule which obtains in regard to the design of the Tracery, generally holds good with respect to the detail; and that the circle is as prevalent and characteristic a feature in the Profile of the Mouldings of a Geometrical Window as the ogee is in those of Curvilinear character.

A comparison of the sections of the Window-Arches, given in Plates C, D, and E, will shew this; it will be found, in fact, that, whilst in the former class the depth of the hollows, as well as the roundness of the convex Mouldings, denote the presence of the circle, in the latter the ogee in one form or another, is almost invariable. The double ogee occurs in Curvilinear Windows under the following forms:—

I. As in Sleaford (No 40 and No. 57), Nantwich (No. 46), and St. Mary's, Beverley (No. 43).

II. As in Welbourne, Wellingborough (No. 35),

Yaxley (No. 49), Boston (No. 47), Great Claybrook (No. 58), Great Hale (No. 60), and others.

III. As in the aisle Windows of Holbeach Church.

I. II. III.

SLEAFORD.

WELBOURNE.

HOLBEACH.

The two last forms occur constantly in both Windows and doorways in the Curvilinear Period, but are nowhere to be found in works of genuine Geometrical character.

The first of them is derived from, and resembles a Moulding which is common in Lancet and Geometrical Windows, and which, although exhibiting the ogee, is to be looked upon as little else than a slight departure from the common filleted bowtel of those Periods. It occurs in Netley (No. 8) and Grantham (No. 10), and in the east Window of Lincoln Cathedral, but in the form more nearly approaching the Curvilinear example in the south aisle Window of Guisborough Abbey.

GUISBOROUGH.

The different orders of the WINDOW-ARCH seldom consist of the same Mouldings, and do not often even resemble each other.

This is perhaps less the case with the earliest Windows than with the later ones. Four out of the five orders of Netley (p. 36), for instance, are similar, and the two orders of the five series in the

Window at Grantham (No. 10) are nearly so. So also are the two plain orders in Easby (No. 18), and the richer ones of Howden (Nos. 14 and 20).

On the other hand, the rich series of Curvilinear Arch-mouldings, commencing with Carlisle (No. 37) and ending with Beverley (No. 43), (Plates D and E,) exhibit profiles of great variety and beauty; amongst which the elegant examples of the six-light Window, in the North Transept of Sleaford (No. 40), and the three-light Window in the North aisle of the chancel of St. Mary's, at Beverley (No. 43), may be said to be preeminent.

As soon, however, as the double ogee began to be a prevalent curve, the practice of repetition in the orders of Mouldings, both of Windows and Doorways, became again very common, as in Great Claybrook (No. 58) and Boston (No. 47).

TRACERY has been divided by Professor Willis into two classes:* 1. That which has a *Fillet* on its surface; and 2. That which has a *Roll* on its surface; and he has termed the two descriptions "Fillet-tracery" and "Roll-tracery." There is, however, another description, namely, that in which the surface Moulding is angular; as in the large six-light Window in the Transepts of the Church of the Holy Trinity at Hull (No. 29), in which the whole of the Tracery of the second order is formed in this manner. This description of Tracery may be called "*Edge*-tracery." It

HULL.

* "Remarks on the Architecture of the Middle Ages," p. 54. Deighton, Cambridge, 1835.

prevailed at the latter end of the Geometrical Period.

The whole of the Tracery and Foliation of the beautiful three-light Window of Herne Church, already alluded to,* is constructed in this manner.

The spire of Chesham Church† furnishes us with a two-light, and Evington Church† with a four-light, in which Edge-tracery is used in the foliation of the heads of the lights only.

In the five-light Window in the Chapel of St. Anselm in Canterbury Cathedral,† there is a large and remarkable centrepiece, the Tracery of which, in two orders, is entirely of this character.

Roll-tracery is more common in Geometrical, than in Curvilinear Windows, and Edge-tracery is almost entirely confined to a short interval, of probably only a few years, at the close of the Geometrical Period.

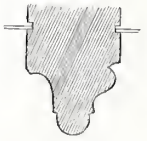
The section of a Tracery-bar is usually the same on both sides. This rule, which may be said to obtain throughout the whole of the Curvilinear Period, has its exceptions in the Geometrical Period. Occasionally, the circular centrepiece has a different series of Mouldings, on the inside and on the outside; as in Westminster (No. 7), Rudstone (No. 6), and Arreton (No. 2), and in the east Window of Lin-

LINCOLN.

* "Brandon's Analysis."

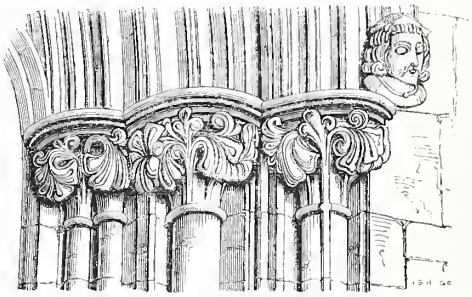
† "Architectural History of Canterbury Cathedral," by Professor Willis. Longman, London.

eoln Cathedral (No. 11), where the whole of the cireles exhibit this peculiarity. Where, also, two orders of Foliation are used, not oeeurring together, a Traeery-bar will sometimes shew a different profile on its two sides, as in the aisle Windows of Howden (p. 48).



HOWDEN.

The Mullion is to the Traeery-bar what the Jamb is to the Window-Areh, or what, on a larger scale, the Pier is to its Areh. This analogy is most apparent in those earlier and rieher Windows of both periods, where the Mullions

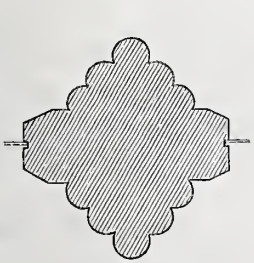


GRANTHAM. WEST WINDOW, N. AISLE.

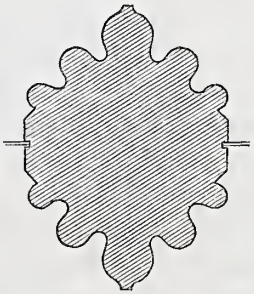
eonsist of small shafts, with eapitals and bases. The relation which sueh Mullions bear to their Traeery-bars, and the alteration of profile above the eapitals, is exemplified in the aeeompanying woodeuts, whieh represent the plans of the Mullions and Traeery-bars of the Early Geometrical Window of Lineoln (No. 11), the Late Geometrical Window of Guisborough (No. 17),

and the Curvilinear Window of Heckington (No. 37).

LINCOLN.

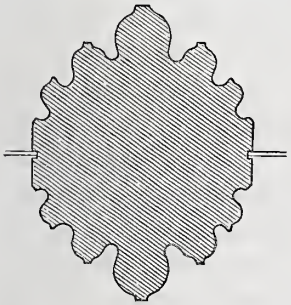


Mullion.

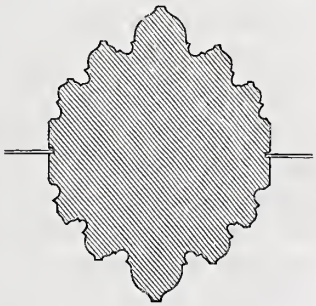


Tracery.

GUISBOROUGH.

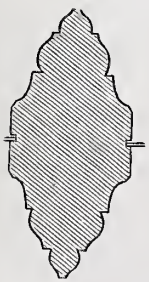


Mullion.

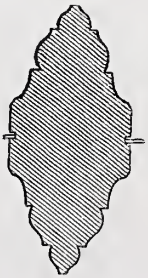


Tracery.

HECKINGTON.



Mullion.



Tracery.

In the last mentioned it will be seen that the section of the Mouldings above and below the capitals is the same.

It does not follow that Windows, the design of whose Tracery is elaborate, exhibit a corresponding richness in their Mouldings: it frequently happens, on the contrary, that the Window-heads of the most intricate pattern exhibit a Window-arch of the most simple profile.

Rich as are the Mouldings in some of the earlier Curvilinear Windows, it cannot be denied that a certain heaviness and inelegance is observable in the details of the latter part of this Period, which contrast unfavourably with the effective combinations in the Mouldings of the preceding Period.

There is little doubt, in fact, that the art of moulding stonework, which had been constantly advancing for three centuries, reached its perfection at the commencement of the fourteenth century; then as gradually declined through that and the two following centuries, and became finally extinct, so far as originality of design was concerned, in the seventeenth.

PART II.

CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL TRACERIED WINDOWS IN ENGLAND.

CHAPTER I.

THE GEOMETRICAL PERIOD.

SECTION I.

EARLY GEOMETRICAL.

From the preceding remarks it will be perceived that it is proposed to apply the term Geometrical to a large number of Windows which have hitherto been described and considered as Early English; but which contain Tracery, in the sense in which that term is explained in the fourth chapter of Part I.

The advantage resulting from this division of our earliest Pointed Windows, and the application of the term Tracery, as now sought to be established, are obvious; for we are thus enabled not only to limit and describe the Windows of the earlier Period by a term sufficiently characteristic, but also to class, in a simple manner, the whole of the Windows of Pointed form under four heads,

and to denominate them according to their leading features:—

I. Lancet. III. Curvilinear.
II. Geometrical. IV. Rectilinear.

Having undertaken the illustration of those which belong to the Geometrical and Curvilinear Periods, we have treated of Lancet Windows only so far as was necessary to shew the origin of the Window of many lights, with its mullions and tracery; and of Rectilinear Windows only so far as was necessary in order to define the limits of the preceding Period.

It remains for us now to take a brief chronological view of the principal Windows of Geometrical and Curvilinear Tracery in the Kingdom; and to notice the gradual change of form through which the Window-head passed during these Periods.

In our endeavour to determine the commencement of this era, we are naturally first led to inquire for that description of external testimony which may enable us to fix, from credible historical sources, the precise date of those buildings which contain the earliest examples of Geometrical Tracery.

It, however, unfortunately happens, that no period of our Architectural History is so singularly barren in documentary evidence of this nature as that which intervenes between the years 1230 and 1280.

Of the many important buildings that remain, which must necessarily have been constructed during this period, scarcely one satisfactory notice is to be found in their chronicles sufficient to fix the exact

time of their construction. Such scanty information as we do possess becomes, therefore, doubly valuable to us, and all discoveries of evidence relating to this important period deserve to be carefully noted, and publicly recorded.

There appears to be little doubt, however, that the first building in which Tracery, as previously defined, made its appearance in England, and of which the date may be said to be authentically established, is the Abbey Church of St. Peter at WESTMINSTER; the foundation stone of which was laid, and the design therefore prepared, in the year of our Lord 1245. The Choir, Transepts, and easternmost part of the Nave, were built, in all probability, in accordance with the original design, and appear, from documentary evidence, to have been carried on slowly but continuously from East to West for several years.

With the exception of two rows of Lancet Windows at each end of the Transepts, the whole of the original Windows of this part of the building are Traceried Windows, principally of two lights, and are excellent examples of the earliest description of Geometrical Tracery; they consist of two plain Lancet-headed lights, carrying a foliated circle, the foils of which are formed with soffit-cusps:

WESTMINSTER.

the jamb and the mullions have shafts with rich moulded capitals, and the Window-Arch is also moulded.

These Windows of Westminster Abbey Church may be taken as the type of a large class of Geometrical Windows, the Tracery of which is entirely composed of plain or foliated circles, and which may be said to constitute the first subdivision of the Geometrical Period, and may be denominated accordingly, *Early Geometrical.*

It appears, however, probable, that some time elapsed before the example of constructing Tracery thus set in this Metropolitan Church, and derived, as it no doubt was, from the Continent, was generally followed, and the Lancet Window entirely abandoned.

Not only is this the case in several important buildings then in the course of construction,* which, as having been commenced in the earlier Period, were, according to the general practice, completed in conformity with the original designs; but we also find new foundations commenced after this Period not entirely free from the influence of the earlier style. Thus, in the Choir of Netley Abbey Church, the convent of which was founded A. D. 1240, we find Lancet Windows in the walls of the side aisles, although the East end contains the fine Geometrical four-light given in this series.

In consequence of the apsidal termination of the East end, no opportunity was afforded in Westmin-

* Ely Cathedral, A. D. 1235—1252. Salisbury Cathedral, A. D. 1220—1258. York, North Transept, A. D. —1260.

ster Abbey Church for the construction of a large Geometrical East Window; what is wanting in the Church is, however, well supplied in the Chapter House, which can authentically be pronounced to have been commenced A.D. 1250. Of the five noble Windows which this most interesting ruin formerly possessed, not one is left; but on the three remaining sides of the octagon, adjoining the South Transept, and other buildings, the blank Tracery—the counterpart, in fact, of that which, on the other five sides was glazed—still remains.*

These Windows (No. 7) are *four-light* Windows of great size and beauty; their mouldings and details are of still Early character, and give but slight indications of a departure from the forms of the Lancet Period.

The Cloisters of WESTMINSTER Abbey contain on the North side Windows possessing Tracery of a character similar to that of the Windows of the Chapter House; but, the inserted cusps having been removed from their original place, the circles have lost their foliation.

The Windows of the Chapter House of SALISBURY

* It is almost incredible, that in these days a building, originally so beautiful, and still possessing within itself sufficient traces of its former condition for a perfect restoration, should be permitted to remain in its present mutilated state, the inconvenient store-room of the National Records; or, that so important and valuable a monument of national art should be thereby rendered all but inaccessible. Nor can it be considered otherwise than as a matter to be deplored, that the cost of one single compartment of the contiguous modern buildings, upon which the nation has lavished its treasures, which would go far to restore their impoverished neighbour to its former noble condition, and its original high use and destination, has not been spared or provided for this purpose.

Cathedral, as well as those of the Cloisters, bear a striking resemblance to those of the Chapter House at Westminster; and were constructed, in all probability, by Bishop Bridport, who governed the see A.D. 1256—1262; and whose tomb still remains in the Church to identify the character of the work of his time.

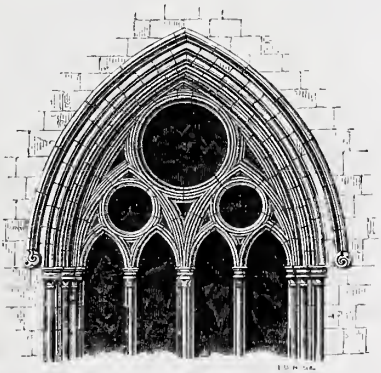
The East Window of NETLEY Abbey Church (No. 8) is another fine example of an Early Geometrical *four-light* of large size; and appears to be, as already noticed, of the same date as the Lancet Windows in the side aisles.

It is, however, to be noted, that as the East Window of a Choir was the largest window in the building, occupying the entire front, and was generally the last Window fixed, so it frequently happens that it contains symptoms of advance upon the aisle Windows; this is the case in Carlisle Cathedral and Selby Abbey Church, the East Windows of which are Curvilinear, whilst the adjoining aisle Windows, and all their details, are of Geometrical character.

Of *six-light* Windows of this character, the East Window of RAUNDS (No. 9) is a good specimen; it is represented in this series as it exists at present, with circles, having no cusps: it has, however, been discovered that the whole of the circles are actually grooved for soffit-cusps, and that, the cusps having been removed, the grooves have been subsequently filled up with cement.* It appears, indeed, to be

* This discovery was made and communicated by Gilbert Scott, Esq., after the window was engraved.

extremely doubtful whether any of the plain circles at present to be found in the larger Geometrical Windows were originally designed without cusps. Thus, the noble *six-light* Window of GRANTHAM, (No. 10) which contains thirteen circles of nearly equal size in its head, the whole of which were filled, during a recent restoration, with *cast-iron* soffit cusps, may have originally been foliated, although, like the adjoining *four-light* Windows of similar character, they possessed no cusps at the time of the restoration.



GRANTHAM.

The North Transept of HEREFORD Cathedral contains some very remarkable Windows of Early Geometrical character; the most striking of these is a lofty *six-light* Window in the North end, divided by a large central pier of clustered shafts into two compartments of three-lights each. The design is of the usual character, a circle carried by two arches, the radius of which is so long, and the curve so flat, as to give the arch of the Window-head the appearance of being almost straight-sided; the whole of the circles have been originally foliated, but some have lost their cusps. The side Windows are *three-lights* of similar character; those

on the West side being very lofty, rising nearly the entire height of the Transept.

Another remarkable Window of considerable size is to be found in the West end of the Priory Church at BINHAM. It is inserted in a front of earlier workmanship, and exhibits a similar design of an octo-foliated circle carried on two arches having sexfoliated circles in their heads; these circles are, in their turn, carried by two smaller arches, which are again similarly subdivided, and an *eight-light* Window is thus produced, of striking appearance and proportions.

Far surpassing the last mentioned example in size and symmetry, but similar in its general arrangement and subdivision, is the magnificent East Window of LINCOLN Cathedral (No. 11). This Window may be pronounced the Queen of the Windows of the Geometrical Period, as that of Carlisle is of the Curvilinear Period.

If we analyse the design of this Window, we shall find that the Tracery contains three orders of Mouldings, the first of which indicates the leading feature of the design, a large circle carried by two pointed arches; each of these arches contains again two smaller arches, carrying also a circle, the outline of which is traced by the second order of Mouldings; and lastly, each of these smaller arches is similarly subdivided, the third order of Mouldings defining the outline of the smallest pair of arches, which have, like the others, a circle above them.

Allowing for the difference in point of size, the

similarity between this Window and the West Window of Grantham Church, is as great as can exist between a Window of eight, and one of six lights; they both contain thirteen circles, the centre-pieces* being identically the same;—the heads of the lights are in both cases unfoliated, and all the mullions have shafts with foliaged capitals.

Above this Window is a fine *five-light* Window of similar character; and the Clerestory and side aisles of this portion of the building (the Presbytery) contain *four* and *three-light* Windows of great beauty and corresponding design.

In the year of our Lord 1256, King Henry III., in accordance with the petition of the Dean and canons of Lincoln, for leave to take down the city wall, in order to extend their cathedral towards the east, appointed a commission to inquire into and report upon the feasibility of doing this without detriment to the city;† and, in the year 1282, we find that the body of St. Hugh was translated to his new shrine in the Presbytery. Hence, it is highly probable that the whole of the Presbytery, and therefore these Windows, were constructed in the interval; a supposition which accords with the character of the building. And, considering the sumptuous nature of the work, and the time that must have been occupied in its construction, we have reason to conclude that the commission instituted in 1256, reported favourably, and that the

* The principal figure occupying the centre of the design of a Window-head may be called the "centre-piece."

† Dugdale's "Monasticon." New edition, vol. vi. p. 1278.

design was prepared, and the work commenced not later than A. D. 1260.

Of a somewhat more advanced, though still early character, are the magnificent *eight-light* East Window (No. 12), and the two fine *six-light* Windows, of the Transepts of TINTERN Abbey Church.*

Here, as in Lincoln, the East Window is divided by a massive central mullion of three orders; but, in this case, the two large arches of the Tracery are concentric with the Window-Arch itself; and, instead of one large circular centre-piece, we have three circles of nearly equal size, the central one occupying its usual position, and containing four cinqfoils; the smaller ones filling the head of each of the large arches, and containing three cinqfoils. This peculiar arrangement has caused the introduction of a feature which is believed to be unique;—in the large spandrel lying between the bottom of the centre-piece and the principal arches, a perpendicular stone post has been placed over the centre mullion, which, whilst it gives support to the circle, serves also to fill what would otherwise have been a wide and unsightly gap. Another peculiarity in this Window is, that the heads of the lights are not formed, as usual, of small trifoliated arches, but simply of trefoils, each pair of which carries a cinqfoliated circle, the spandrel between them not being pierced, but left solid, manifestly for the

* See "Architectural Parallels." Van Voorst. London. 1848. Plate 48.

purpose of strength. In like manner the large circles contain, not foliated circles, but cinqfoils.* The two *six-light* Windows are of similar character, and are equal in height to the East Window.

TINTERN.

The Windows of the side aisles and Clerestory, are *two-lights* of perfectly similar character.

This church was entirely rebuilt by Roger Bigod, and consecrated A. D. 1287.

There is, perhaps, no description of Window so well suited to the character of Early Geometrical Tracery, as that which consists of four lights. We accordingly find this class the most numerous. Of *five-light* Windows the number is very small. The Window at the East end of the aisle in BEDALE Church (No. 13), and the East Window of NEW ABBEY Church, county Galloway, being rare instances.

* The problem of determining the actual design of this noble Window, from the small remains on the ground, and the fragments to be found still in the frame of the Window-Arch, which was a work of no small labour and search, was successfully accomplished by the editor, assisted by Mr. T. Austin and Mr. Payne, the warden of the abbey grounds, in the summer of 1846. The missing pieces of tracery which were discovered in the ruins during this search, and which verify the correctness of this restoration, are now carefully preserved in the custody of Mr. Payne.

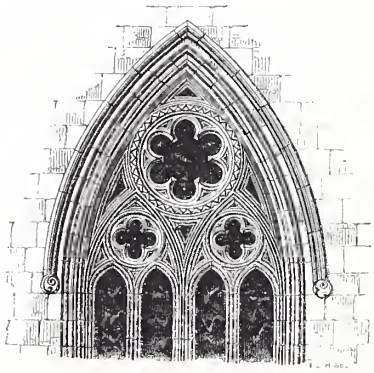
The *four-light* Windows of the Chapter Houses and Cloisters of WESTMINSTER and SALISBURY Cathedrals, have already been noticed.

In the staircase and approach to the Chapter House of WELLS Cathedral are similar Windows of great beauty.

The Transepts of HOWDEN Collegiate Church contain a fine *four-light* Window in each of their opposite ends (No. 14), and corresponding *two-light* Windows in their sides.

The West Towers of BAKEWELL and DAVENHAM Churches contain good examples of Early Geometrical *four-lights*.

The East Window of NETLEY Abbey Church (No. 8), has been already noticed, as well as the elegant four-light in the North aisle of the Nave of GRANTHAM Church (p. 63).



STONE.

The East Window of the North aisle of STONE Church is a Geometrical Window of the earliest character, and of great beauty; in its proportions, and the richness of its detail, it may be said to be unsurpassed; the whole of the latter is lavished, as in the Netley Window, on the inside.

The East Window of St. John's Church, WINCHESTER, is of this character, and is remarkable for having the heads of its lights cinqfoiled.

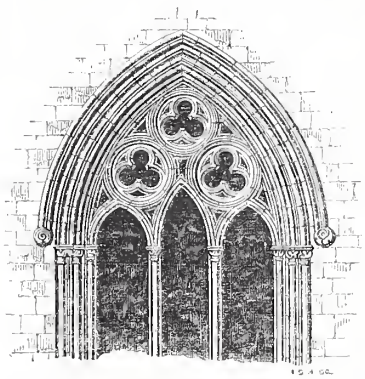
The East Window of the choir of ST. ALBAN'S Abbey Church, and the clerestory Windows of the choir of RIPON Cathedral, are fine *four-light* Windows of the same class; as are also the smaller Windows at the east end of RUDSTONE Church (No. 6), and several in the South aisle and Transepts of MELTON MOWBRAY Church.

The design of the whole of these Windows is identically the same, and exhibits the elemental principle of Tracery, as defined in Chapter III. Section I. in its simplest form and most beautiful proportions; the only variation throughout the whole of them being, the extent to which the Foliation is carried. They all consist of two principal arches carrying a large circle, and containing two smaller secondary arches, and a small circle above them, the Foliation being in some cases confined to the circles, and in others extended to the lights.

Of Early Geometrical *three-lights* there is no scarcity. In addition to those of OUNDLE (No. 5) and BOURNE (No. 3), given in this collection, and those in the North Transept of HEREFORD Cathedral, and the Presbytery of LINCOLN, already noticed, the *three-lights* of the Nave aisles of LICHFIELD Cathedral may be mentioned as good examples. ARRETON Church has a good Early *three-light*, similar in character to the *two-light* (No. 2).

The East end of the Choir of ROMSEY Church

contains some elegant *three-light* Windows, having foliated circles in their heads, and a rich leaf in the hollow of the jambs, and the Chapel of the Bishop's Palace at WELLS, has Windows of similar character.

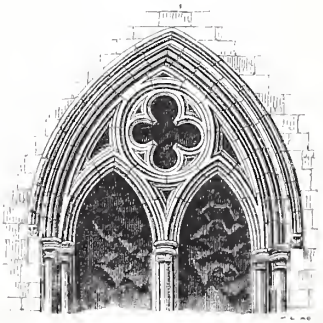


LICHFIELD.

Of *two-light* Windows there is a great abundance. In addition to those already noticed and given in this series, may be added some very early and interesting Windows in the South Transept of ELY Cathedral.

They exhibit a foliated circle carried by two Lancets, having on the outside elegant shafts, both on the jamb and mullion, of two orders, with tall capitals and good mouldings; and on the inside a deep Rear-vault, and richly moulded Scoinson-arch. The mouldings are so nearly identical with those of the Lancet Period; and the whole of the character of the work has so early an appearance, as to afford good testimony of the fact, that Tracery, as before defined, is the first

ELY.



South Transept

leading feature of change from the Lancet to the Geometrical Period, and, therefore, the proper feature by which to characterize the latter.

In the Choir of the Abbey Church of St. Alban's there are several Early Geometrical *two-lights*, with proportions and details very similar to those last mentioned.

STONE.

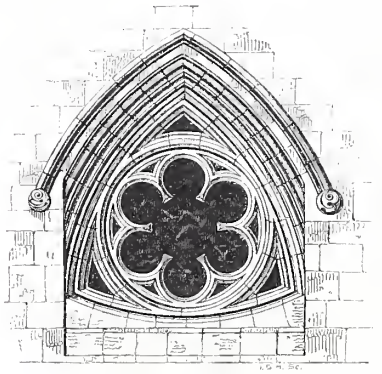
Stone Church, in Kent, is remarkable, as uniting some of the latest examples of Lancet work with some of the earliest Windows of Geometrical character; the fine *four-light* in the North aisle has already been noticed (p. 68); the accompanying *two-light* is of similar design.

In the Clerestories of buildings of the Early Geometrical Period, and occasionally in gable-ends, and elsewhere, there is to be found a Window of unusual form, which rarely occurs in any other Period. Its form is that of a spherical triangle, containing one or more foliated circles.

The earliest indication of this form occurs in the Transept of Salisbury Cathedral, where, however, owing to the want of thorough perforation, the design has an incomplete appearance, and no Tracery is formed.

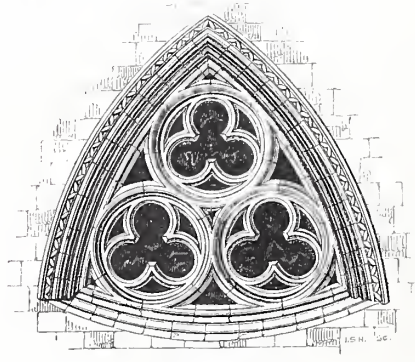
The earliest complete specimen is found in the upper part of the aisles, and the south walls of the

Transepts of Wesminster Abbey Church; where it occurs inclosed in a low Arch, resting on short side-shafts.



HEREFORD.

An example almost identically the same exists in the Clerestory of the Transept of Hereford Cathedral; the only difference being, that in the latter example the circle is sexfoliated, instead of octofoliated, and that the Window-Arch, which in the former example rests on a shaft, in this case dies into a straight-sided jamb.



LICHFIELD.

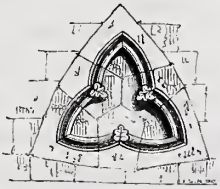
The Clerestory of the Nave of Lichfield Cathedral contains a Window of similar form, which is, in this instance, filled, like the heads of the side-aisle Windows, with three trifoliated circles, and has a Window-Arch, the Mouldings of which come down to the curved Window-sill.

SECTION II.

LATE GEOMETRICAL.

The East Windows of Lincoln and Tintern possess a feature which was capable of considerable modification, without exceeding the limits of the strict geometrical outline which bounded it. They both contain the large circular centre-piece, which is to be found in nearly the whole of the Early Geometrical Windows, with this difference, however, that in the case of Lincoln instead of being a simple foliated circle, it consists of a large circle filled with seven small foliated circles, and in the case of Tintern of one containing four cinqfoils. It is evident that the number and the form of these foliated figures may be considerably varied; and we accordingly find this license taken in the beautiful East Window of Ripon Cathedral (No. 16), where the circular centre-piece contains three circular, and three pointed trefoils, alternately disposed.

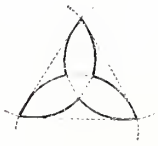
It was this license that gave rise to the introduction of a feature of great beauty, which immediately became the characteristic ornament of Late Geometrical Tracery.



ELY.

This was the elegant, long-lobed, pointed trefoil, the origin of which is to be looked for in the Lancet Period, and which in another form served so frequently to decorate the spandrils and arcades of that Period.

This feature is to be found in one form or another in most of the Windows of Late Geometrical character. It appears on a large scale in the East Window of Ripon Cathedral (No. 16), and in the following Windows of the accompanying series:—Guisborough (No. 17), Howden (No. 20), Temple Balsall (No. 19), Cartmel (No. 22), Leominster (No. 21), Wells (No. 30); and at the very close of the Period, in Trent (No. 54), Milton Abbey (No. 31); and in the very commencement of the Curvilinear Period, in Wellingborough (No. 35), where it carries a second order of Foliation.



In most cases this trefoil consists of three equal and similar foils or lobes, which are generally formed by the intersection of three circles, as in nearly all the examples just referred to.

In this condition it is the most graceful, and therefore the most popular form of expression for the Holy Trinity. Perhaps in no period of Church Architecture, and in no part of a building, was symbolism of this simple and expressive character more unequivocally displayed than it was in the Window Tracery of the Geometrical Period. There is scarcely a single window in the accompanying series belonging to this Period, in which this sacred number does not somewhere appear. The heads of the lights were almost invariably trefoiled, or trifoliated. In the Windows of Howden (No. 20), Temple Balsall (No. 19), and Whitby (No. 32), trifoliated openings only appear; and in the rest

the trefoil greatly predominates over every other form of perforation.

The *pointed trefoil* may therefore be considered as characteristic a feature of the Late Geometrical, as the *foliated circle* was of the Early Geometrical Period.

It did not long remain the ornament of the centre-piece alone; its applicability to other parts of the Window became at once apparent; its usefulness in filling those spandrels or interstitial spaces which, in the Earlier Geometrical Windows, had been left blank, was speedily recognized (EASBY, No. 18); and its almost immediate adoption in every part of the Window Head gave a stimulus to the development of Tracery, which produced results that were often remarkable, and occasionally singular and almost unique.

The simplicity and similarity of outline which characterized the Early Geometrical Windows is not to be found in those of Late Geometrical date; they exhibit, on the contrary, great diversity and originality of design; they admit, however, of a certain classification, and may be grouped, according to their leading peculiarities, principally under four or five heads.

Retaining, then, the term *Geometrical*, in the conventional sense in which it was used by Mr. Rickman, and has been adopted by almost all subsequent writers on the subject, as well for the Later Windows of this character as for the Earlier ones, we will take a hasty view of the different groups in which they may be classed.

Those retaining the large *circular centre-piece* appear to be first deserving of notice.

1. The largest and, altogether, the noblest Window of Late Geometrical character in this country, is the *seven-light* East Window of the Conventual Church of St. Mary at Guisborough (No. 17). It is the loftiest Window in this collection, exceeding by three feet six inches, the East Window of Carlisle Cathedral, and by two feet six inches the West Window of York: the relative heights of the three being as follows:—

Guisborough,	York,	Carlisle,
63 ft.	60 ft. 6 in.	59 ft. 8 in.

If the tracery of Carlisle may be said to be more graceful than that of Guisborough, the proportions of the Geometrical example will certainly be allowed to surpass those of its Curvilinear rival.

In this respect, indeed, it may perhaps be pronounced to be without a competitor; the height of its mullions (34 ft.) exceeding those of any untransomed Window in the Kingdom.

Had the West Window of York Cathedral been finished according to the original design, it is possible that the Guisborough Window might have stood second only in the list of Windows of this date; as it is, the Late Curvilinear Tracery with which the Geometrical outline of the former is filled, gives an anomalous character to this fine Window, which renders it unlike any other.

The Choir of the Abbey Church at Guisborough was totally destroyed by fire, A.D. 1288, and was

rebuilt on a magnificent scale immediately afterwards.

The East Window of RIPON Cathedral, of *seven lights* (No. 16), belongs to the same class, and ranks next to the Guisborough Window in point of size and beauty, but somewhat earlier in point of date. It contains in its centre-piece the alternate arrangement of three pointed and three circular trefoils, which obtains in so many Windows of this class, and in several of the accompanying series, but in none on so large a scale, and of such striking proportions as in this example.*

The East Window of the Refectory of EASBY Abbey, of *five lights* (No. 18), has a circular centre-piece, containing five circular trefoils, and supported by two cinquefoliated circles.

EASBY.

This Window having, like the preceding examples, an unequal number of lights, has an acute arch over the centre light, supporting the centre-piece, which is, in all the three examples, filled with a long pointed trefoil; in this case, however, the side-spandrels lying between the centre-piece and the Window-Arch, which in the former instances are blank, are also filled by similar trefoils, formed by soffit-cusps of the second order of Foliation; exhibiting an early instance of the appearance of foliation in this situation.

* The radius of the circle forming the pointed trefoils is no less than three feet in length.

Temple Balsall Church, in Warwickshire, has a *three-light* Window (No. 19), which has three circles in its head, each of which contain the alternate arrangement of three circular and three pointed trefoils.

HOWDEN.

The Cloister of Lincoln Cathedral, and the North and South Aisles of the Nave of Howden Collegiate Church (No. 20), contain *four-light* Windows, having a centre-piece of precisely similar character.

The Windows of the South Aisle of the Church of St. Peter and St. Paul, at Leominster, of *four lights*, (No. 21), exhibit a very similar centre-piece, but have other marks betokening their later character.

The *five-light* Clerestory Windows of the Choir and Nave of Exeter Cathedral have large centre-pieces, filled with trefoils and other Geometrical figures; they contain, however, one feature exhibiting decided advancement,—the side-spandrels are occupied with various figures; in the earlier Windows of the Choir (No. 24), the trefoil is simply and awkwardly inserted at the top of the supporting arches, but in those of the Nave (No. 36), the first step is taken towards the construction of Flowing Tracery, by the conversion of the upper part of the supporting arches into the graceful ogee, which thus not only accommodates itself to the form of the circular centre-piece, but gives to the span-

drel a grace and a fitness which it had hitherto wanted.

The next example to be noticed, of this class, is the fine *five-light* Window in the East end of WELLINGBOROUGH Church (No. 35).

WELLINGBOROUGH.

It contains the alternate arrangement of trefoils in its beautiful centre-piece; the three principal ones of which shew a double order of Foliation. It is, however, singular, in exhibiting the ogee in almost every part of the design, except in that in which it was alone employed in the last-mentioned Window, and in which its usefulness became afterwards so strikingly apparent. The side spandrels are inelegantly occupied by an irregular trefoil. Perhaps no Window can be more advantageously selected, as marking the termination of the Geometrical Period, and the commencement of the next, as this example; a very slight alteration of the design would convert it into one of pure Curvilinear character.

A centre-piece deserves to be here mentioned, which occurs in a few Windows of this date. The West Window of HOWDEN Church (No. 27) contains an example of it. It is called, in the description of that Window, a *spherical square*, from the circumstance that, formed as it is, by the inversion of the upper portion of the Window-Arch, it represents a square with the sides curved slightly outwards: it

contains in this Window, as well as in the South Window of St. Andrew, at TRENT (No. 25), a trifoliated quatrefoil. The South Aisle of BILLINGBOROUGH Church (No. 23) contains another example of the same kind. At the West end of the Side Aisles of the Nave of WHITBY Abbey Church, this figure appears as a distinct Window, containing four quatrefoils: precisely the same design appears in composition in the head of a Window in the North Aisle of the Nave of HEADON Church.

The equilateral *spherical triangle* was also abundantly used in composition in Late Geometrical work; the East Window of St. Peter's, at Dunchurch, is a well known example, and has been frequently referred to: the large *six-light* Window, in the Transepts of the Church of the Holy Trinity at HULL (No. 29), contains three large spherical triangles filled with minute Tracery; and the large Curvilinear *eight-light* Window in the South Transept of CHICHESTER Cathedral, exhibits a large spherical triangle as a centre-piece, divided into three compartments of elegant flowing Tracery.

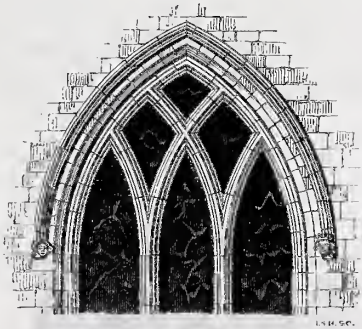
ST. ALBANS.

A centre-piece of elegant design is to be found at the East end of the Aisle of the Choir of ST. ALBAN'S Abbey Church; and an example of precisely the same figure occurs in a Window in the North Aisle of DOR-

CHESTER Church. They are *three-light* Windows, of nearly identical design, and of Late Geometrical character.

2. Another class of Late Geometrical Windows consists of those which contain what has been called *intersecting Tracery;* or those in which the Mullions becoming the principal Tracery-bars, are continued through the Window-head in arcs of similar curvature, and, intersecting one another, terminate in the Window-arch. This description of Window, in its simplest and earliest form, without tracery and foliation, is not uncommon at the close of the Lancet Period; it may be looked upon as a step in advance of the example given in Plate A., Fig. 9.

The North Aisle of SCOTTON Church, Lincolnshire, contains several large *three-light* Windows of this kind: and BARHOLME Church has a similar example.

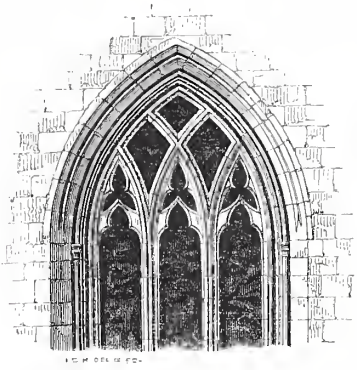


BARHOLME.

This form was never altogether lost sight of in the Early Geometrical Period; but the predominant centre-piece prevailed against its frequent use: it is easily to be traced down to the subsequent periods.

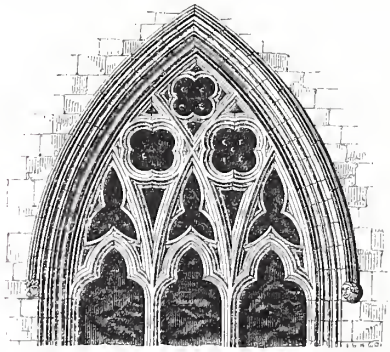
We find it first in a *three-light* Window of the

Tower of St. Mary's, Oxford; with the addition of Foliation in the heads of the lights only, the intervening spaces between the points of intersection remaining still uncusped.



ST. MARY'S, OXFORD.

In Cranford St. John,* also a *three-light*, we find the whole of the spaces foliated with soffit-cusps: and again, in the *three-light* East Window of Meopham Church,† we have a complete Early Geometrical traceried Window, with foliated circles between the principal intersecting Tracery-bars. Later still, we find it in one of the beautiful and varied Windows of the Nave of Howden Collegiate Church, where the intervening spaces are filled with pointed trefoils and quatrefoils.



HOWDEN.

A *three-light* Window of still later and very

* Brandon's "Analysis;" Windows, App. No. 23.

† Ibid. Sect. I. Pl. 10.

elegant character, is to be seen in HERNE Church, Kent,* the head of which is filled with Edge-tracery of very minute and beautiful pattern.

A *five-light* Window in SOUTHFLEET Church, Kent,† has a Window-head of this kind, in which the intervening spaces are entirely filled with pointed quatrefoils, diminishing in size as they ascend.

The East Window of SOLIHULL Church, of *five-lights*, is of similar character.

It is clear that the principle upon which these Windows are designed is incompatible with the idea of a centre-piece: in *four* and *five-light* Windows, however, we occasionally see attempts made to introduce this favourite feature, by arresting the continuation of some of the Tracery-bars, and thus providing a small space in the upper part of the Window-head, which is then occupied by a Foliated Circle.

RATCLIFFE.

The *four-light* East Window of RATCLIFFE Church, Nottinghamshire, may be said to belong to this class of Windows: and WATFORD Church, Northamptonshire, has a *five-light* Window, and COTTINGHAM Church, Northamptonshire,‡ has a *four-light*, of precisely similar character.

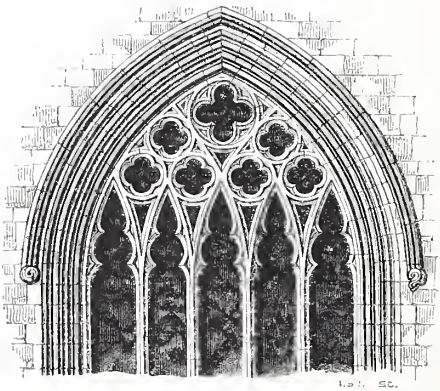
* Brandon's "Analysis," Sect. I. Pl. 20.

† Ibid. Pl. 43.

‡ Ibid. Sect. I.

The *four-light* Windows of the Chapter House at Wells (No. 30), although the eentre-pieee is larger than usual, may be said to belong to this class.

The *five-light* Window in the East Wall of the North Transept of Bristol Cathedral, in which the



BRISTOL CATHEDRAL.

eentre-pieee is redueed to very small dimensions, is a good example of this species of Traeery; and Trumpington Chureh, Cambridgeshire, has a *five-light* East Window,* to whieh the same remarks apply.

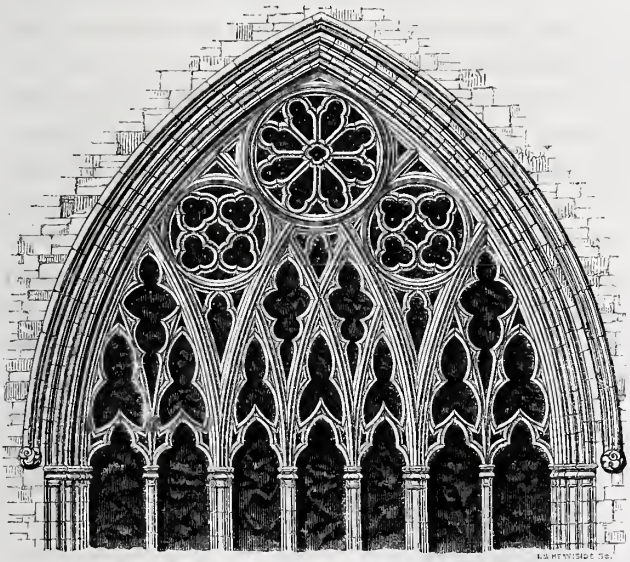
Three fine Windows of this elass still remain to be notieed: the earliest of these is the noble *six-light* Window, at the North end of the Eastern Transept of Durham Cathedral, called the Nine Altars:† this Window is divided into three great, equal, and similar eompartments by its principal

* Brandon's "Analysis," Sect. I. Pl. 29.

† Billing's "Durham," Pl. VI.

Mullions and Tracery-bars, which are very prominent, and are the only ones that intersect; the whole of the intervening spaces being filled with Foliated Circles of five different sizes, and no less than eleven in number.

The second is the fine Late Geometrical *seven-light* at the West end of TINTERN Abbey Church;



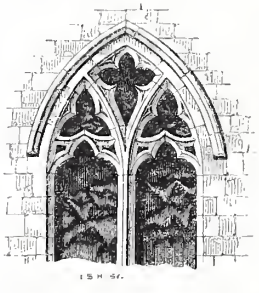
TINTERN.

a Window of very uncommon design, in which the intersection is interrupted not only over the the central, but also over the side compartments.

The third is the magnificent *seven-light* East Window of the Chapel of MERTON COLLEGE, Oxford. This Window is remarkable for several peculiarities; it possesses a large centre-piece, which

intercepts the whole of the intersecting Tracery-bars in the upper part of the Window; it has double foliation in the heads of the lights, and the intervening spaces are multi-foliated; it has small pinnacles and canopies over the heads of the lights, which have crockets and finials, in which respect it resembles the Earlier Window at the East end of BARNACK Church. The whole of the Windows of this building are interesting examples of Late Geometrical work.

3. Throughout the whole of the Geometrical Period are to be found Windows whose Tracery is formed entirely by *Foliation*. The class of Windows we have just been considering, by permitting no large features, and by dividing the whole Window-head into a number of small compartments, of nearly equal size, gave great opportunity for the revival of this practice, the origin of which is to be sought in the early foliated Lancets of the former Period. Several instances of this description of work are given in Brandon's "Analysis."* It is shewn in the Aisle Window of MILTON ABBEY Church (No. 31), and in the accompanying example from TIBSEY Church. CHESTER Cathedral contains some large *four-light* Windows on the South side of the Choir, of this character.

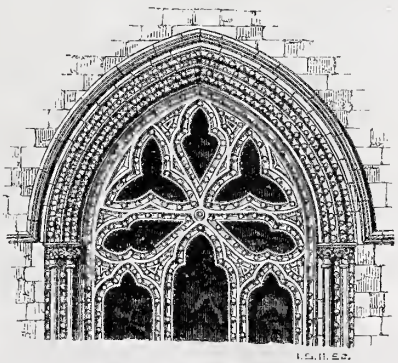


TIBSEY.

* Trumpington. Sect. I. Pl. 29. Stoke Albany,

4. In the counties of Gloucester and Hereford there exists a series of Windows of Late Geometrical date, which deserve separate classification. Their peculiarity consists in the redundant use which is made of the *Ball-flower* in their design; an ornament which sprung into rapid and universal favour about this time.

It appears in the Windows of the Chapter House of WELLS Cathedral (No. 30), in a single row on the outside, but in two orders of the Jamb on the inside. This building was erected in the time of Bishop William De la March, who held the See A. D. 1295 to A. D. 1302.



GLOUCESTER.

It is in the South Aisle of the Transept of GLOUCESTER Cathedral, however, that the profuseness of the builders of these ages, in the use of a favourite ornament, is most conspicuous: in this Aisle, built by Abbot Thokey at the commencement of the fourteenth century, not only are the Windows covered inside and outside,—the Jambs, the Window-arch, the Tracery, and the Foliation,—with Ball-flowers, but the buttresses, canopies, and pinnacles are all studded with them. It appears, in fact, as if the idea had seized them,

that they had discovered a new and beautiful substitute for the formerly popular, but then antiquated, dogtooth; which might be repeated to the same lavish extent, and with the same excellent effect as that elegant ornament. The attempt, however, proved a failure; the richness of effect which strikes the beholder on seeing a first example, is greatly weakened by repetition, and rapidly diminishes as it becomes familiar,—a result which its evident costliness tends to confirm. No richness of effect in detail can compensate for poverty of design; and in the smaller buildings, where the former is studied, the latter becomes unavoidable. It was probably some such consideration as this which confined this description of work to the short period and limited district within which it is to be found.

The Windows of the South Aisle of Leominster Church (No. 21) have been already described: they are probably the largest and handsomest of this class.

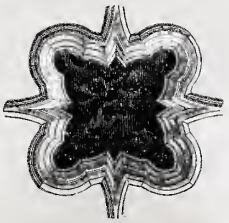
The Churches of Badgeworth* and Maisey Hampton, in Gloucestershire, and of Ledbury, in Herefordshire, all contain examples of Windows of this *ornate* description.

The Central Tower of Hereford Cathedral is covered with Ball-flowers, running in vertical lines up the buttresses and Windows; and on the upper part of the Tower and the Spire of Salisbury Cathedral this mode of decoration is conspicuously displayed.

* See Brandon's "Analysis," Sect. I. Pl. 38.

5. Towards the close of the Geometrical Period there occurred some singular attempts at originality in the designs of Window Tracery. Becoming, apparently, dissatisfied with the extreme formality of the usual Geometrical forms, several fanciful experiments were tried by the builders of this Period, which, without betraying any symptom of the impending change, present—under forms which may still be termed Geometrical in the conventional sense in which we have used the term—very little similarity in their general outline to the examples which we have hitherto been considering.

An early example of the description of Window alluded to occurs in the North Aisle of WHITBY Abbey Church (No. 32), which contains a figure similar to which nothing had hitherto appeared in Window Tracery: it is worked on the second order of the Tracery, and consists of four trefoils, separated by four points or angular openings of peculiar appearance; the figure occurs over each pair of lights, and is repeated as a centre-piece, thus occupying the whole of the Window-head. These points are the characteristic feature of the class of Windows of which we are treating: they occur, in fact, in all the Windows below mentioned.



WHITBY.

CHARTHAM.

Next in point of date, and almost identical in design, is the *four-light*

East Window of CHARTHAM Church, Kent (given by Mr. Petit in his "Remarks on Architectural Character"), which also contains three figures similarly designed. The *two-light* Side Windows of the Chancel of this Church have a similar figure in their heads.

The centre-piece of the *three-light* Window in the South Aisle of BILLINGBOROUGH Church (No. 33) is also of similar character.

LYDDINGTON Church, Berkshire,* and CAPEL ST. MARY, Suffolk,† have *two-light* Windows, and NORTHFLEET Church, Kent, a *three-light*, in which the same features occur in a simpler form.

The whole of these Windows, with the exception, perhaps, of the last mentioned, although of manifestly late date, are still devoid of any strongly-marked Curvilinear features. There remain, however, some to be noticed, which cannot be said to be so entirely clear of Curvilinear influence.

GREAT BEDWYN

The Church of GREAT BEDWYN, Wiltshire, has a *three-light* Window at the ends of the North and South Transepts (No. 34), which exhibits in its form and details many features of Curvilinear character. It contains one of these figures. The North Transept contains the Tomb and Effigy of the Founder, Sir Adam de Stoek, who died

* Brandon's "Analysis." Appendix, Pl. IV. Fig. 35.

† Ibid. Sect. I. Pl. 8.

A. D. 1312, and may be said to have been built within a few years of this date.

The Church of CHADDESLY CORBET, Worcestershire, has a variety of fine Windows, partaking more or less of this character: the East Window, a large and handsome one of *five lights*, has these forms mixed with flowing lines, and a circular centre-piece. The side Windows have some of them the late Geometrical forms, and others decided Curvilinear Tracery.

The most remarkable Window of this class, however, is the singular Window, so minutely described and illustrated by Professor Willis in his "History of CANTERBURY Cathedral" (p. 115), and which exists in the Chapel of St. Anselm in that Church. This Window contains all the peculiarities above described, and although an advanced specimen, may be said to be an excellent representative of this class: it contains a large circular centre-piece, filled with Tracery and Foliation, perfectly similar to that of the centre-piece of the Chaddesly Corbet, and the Hull Windows already quoted: and over the side lights a trifoliated trefoil with *points*.

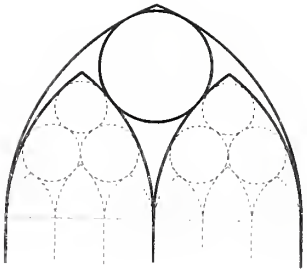
CANTERBURY.

In taking a review of the Windows of the Late Geometrical Period,—we cannot fail of being struck with the fact, that although abounding in pleasing and elegant detail, there is, with one or two remarkable exceptions, a singular want of expression

throughout the whole of them: in many, indeed in most of them, the centre-piece almost entirely disappears, nor is there anything in their general design and composition to compensate for the want of this leading feature. The study of the Architect seems principally to have been, as in the late Curvilinear Period, to fill the Window-head with a variety of elegantly formed perforations, rather than to produce unity of design, or a striking and beautiful whole.

GEOMETRICAL

CURVILINEAR



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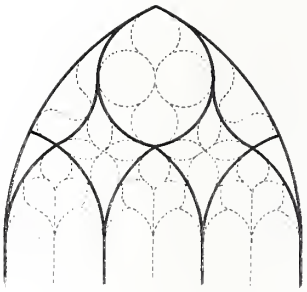
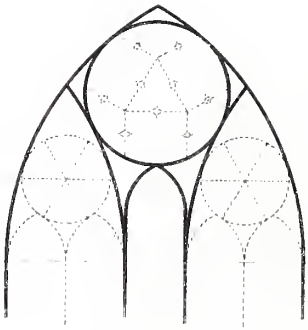


SLEAFORD



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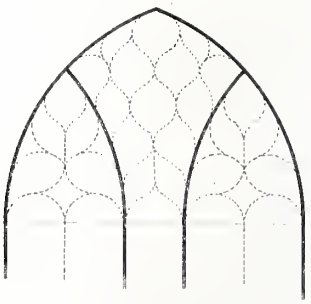

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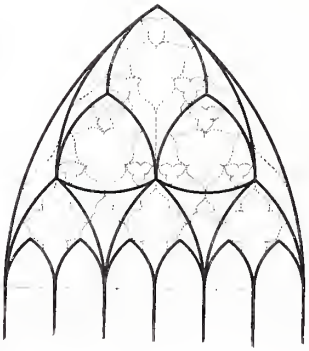

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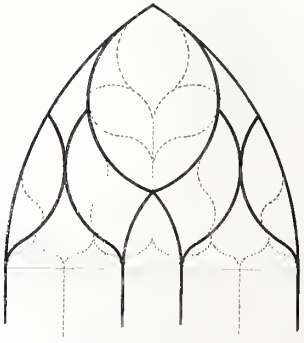


SLEAFORD

London. Published by John Van Voorst, Paternoster Row. 1849.

CHAPTER II.

THE CURVILINEAR PERIOD.

THERE is a remarkable analogy in the history of the Progress of Tracery through the Geometrical and the Curvilinear Periods. On reviewing the Windows of the former period, and the leading principles of their design, we shall find that they are divisible generally into three classes.

1. Those in which the Window-head is occupied by a large and prominent *centre-piece carried by two independent arches;* as in LINCOLN (No. 11), HOWDEN (No. 14), RIPON (No. 16), and GUISBOROUGH (No. 17).

2. Those in which the Window-head is *divided by two main arches* of the same curvature as the Window-arch, into two equal and symmetrical portions, as in TINTERN (No. 12), BEDALE (No. 13), and WHITBY (No. 32).

3. Those in which the Window-head is filled with Tracery, having *no such equal division* of its parts by means of arches, as in HULL (No. 29) and CARTMEL (No. 23).

These are precisely the three classes into which the Windows of the Curvilinear Period most naturally arrange themselves, and the accompanying

Plate D presents parallel examples of the two periods in each of their classes; the black lines representing the outline traced by the primary Mouldings; and the dotted lines that traced by the Mouldings of the second order.

Of these three classes, the first mentioned was the earliest in the Geometrical Period, and may also be said to contain the greatest number of original and beautiful examples: and the like may be said of the corresponding class in the Curvilinear Period.

No sooner was the discovery made that, by the adoption of a graceful curve, the supporting arches might be more conveniently accommodated to the centre-piece, and a vacant and unsightly spandrel converted into an elegant figure, than the neglected centre-piece rose again into high favour: changed somewhat in form, but occupying its former prominent position, and constituting the chief object in the design.

It may be well to notice the manner in which this transformation was effected.

In the early part of the Geometrical Period, the space or spandrel lying between the supporting Arch, the centrepiece, and the Window-Arch, was left blank: sometimes the supporting Arch projected so much beyond the centre-piece as to give this space an irregular form, as in the case of the East Window of Raunds Church (No. 9), and sometimes so little

RAUNDS.

as to leave it triangular, as in the West Window of GRANTHAM Church (No. 10).

In the latter part of the Period, however, when Foliation began to occupy all vacant spaces, this spandrel began to be similarly treated.

GRANTHAM.

The Clerestory Windows of the Choir of EXETER Cathedral (No. 24) shew this spandrel filled with a trefoil; and the more advanced Windows of HULL (No. 29) and WELLINGBOROUGH (No. 35) Churches, Geometrical in their outline, but almost Curvilinear in their details, exhibit further attempts to foliate this opening.

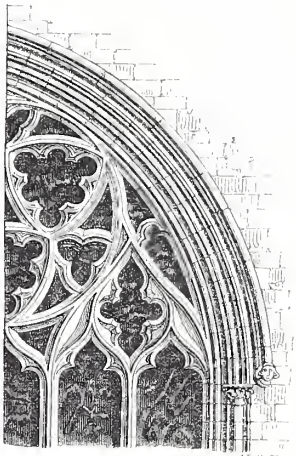
EXETER.

These three last-mentioned examples may, however, be looked upon only as ineffectual attempts, on the part of the Architects of this Period, to mitigate what was felt to be one of the greatest defects of a Traceried Window: the vacant space was filled and foliated, but the inelegant outline of the spandrel remained the same.

WELLINGBOROUGH.

The West Window of the Abbey Church of ST. CROSS exhibits, perhaps, the first successful attempt to get rid of this difficulty: the head of the supporting Arch, in

HULL.



ST. CROSS.

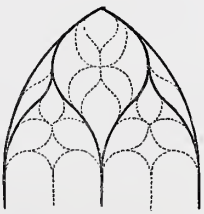
this example, is of a form that is not uncommon at the elose of the Geometrieal Period, shewing a slight ogee at its crown ; the return eurve, thus commeneed, is eontinued by the primary fillet of the Tracery until it meets that of the circular centre-pieee. The defeet above mentioned is thus removed, a new form given to the spandrel, and the supporting Areh graeefully eonneeted with the centre-pieee.

It will be at onee seen, however, that a new defeet had been ereated in removing the old one: a small interstitial spaee is introdueed between the erown of the supporting Areh and the eentre-piece, whieh foreibly illustrates the novelty of the attempt, and its want of eomplete suceess.

The examples we have been hitherto considering contain *circular* centre-pieees, carried by two pointed Arches ; the last example shewing the manner in whieh the supporting Arch was united, by an ogee curve, with the eircle, so as to impart a flowing outline to the whole design.

The next and the last step taken in this Curvilinear progress was still farther to aceommodate the Arch to the centre-pieee, or rather to fuse the one

the other, by converting the *pointed arch* into an *ogee arch*, and the *circle* into a figure of pointed oval form, as shewn in the accompanying outline of the West Window of COTTINGHAM Church (No. 45).



COTTINGHAM.

The ogee having at a much earlier period already found its way into the foliation, and other subordinate parts of Windows, this last-mentioned discovery suddenly completed the Revolution.

CLASS I.

To the first Class of Curvilinear Windows, or those which contain a large oval centre-piece, supported and bounded by two ogee Arches, usually crossing each other, belong many of the most beautiful Windows in the kingdom. Of this class are the three fine and very similar *seven-light* Windows of HAWTON, HECKINGTON (No. 38), and SELBY (No. 42), and the similar *six-light* Windows in the North Transept of SLEAFORD Church (No. 40), and the South Aisle of NEWARK Church.

These Windows in their main outline may be said to be almost identical, the principal difference being in the amount and distribution of their foliated openings: they present a perfect study of the various modes in which the Architects of that day disposed the subordinate parts of their Tracery, and the facility with which they adapted their Foliation to an opening of any given form.

Of *five-light* Windows belonging to this class: the East Windows of HECKINGTON Church (No. 39) and the Grammar School at COVENTRY are good examples; the latter shewing an arrangement and a centre-piece of an elegant and unusual kind.

Throughout the whole of the Windows hitherto mentioned, a peculiarity obtains which requires especial notice: the form and width of the centre-piece in all of them is such, that the apex of the ogee Arch can in no case lie in the centre line of the Arch itself: one side of it becomes accordingly lengthened and distorted,—a defect which is, to some extent, covered and compensated for by the three pointed Arches, which are formed within the two ogee Arches, and which are also marked by the primary Mouldings of the Tracery. (See Plate D.)

A necessary consequence of this arrangement is the distortion of the two spandrels, which lie in the heads of the ogee Arches, between the three pointed Arches and the centre-piece.

It is remarkable that the most agreeable proportions which can be given to this centre-piece, are those which bear the same relation to the whole bulk of the lower parts of the Window which support it, that, in the human figure, the head bears to the body. A glance at the outlines of the Tracery of the Windows before mentioned is sufficient to satisfy us of this; and a comparison between some of them and the outline of the figure of Edward the Black Prince, in Westminster Abbey, and other effigies of the same date, which is identical with that of the Windows themselves, will go far to induce us

to suspect that this fact was not altogether unrecognized by the Architects of this Period.

In this case we have no difficulty in accounting for that distortion, which has been so naturally objected to as a defect in these otherwise beautiful Windows; but which is absolutely unavoidable, if the proportions prescribed by the above rule are to be observed; the only circumstances under which such a centre-piece could be adapted to a Window of many lights, without the distortion referred to, being such as entirely to destroy all idea of such proportion. After all, the defect is one that is much more apparent on paper than in reality; for it is in the elevation of the design that the distortion is most perceptible;—in perspective, except when the Window is seen at some distance, and from a point immediately fronting it, the eye hardly detects it, and is certainly not violently offended by it.

In *four* and *three-light* Windows, this difficulty does not occur. As in the Geometrical, so also in the Curvilinear Period, the *four-light* Window may be invariably taken as the simplest and most perfect type of its class.

Beverly St. Mary's (No. 44), two others in the same Church, Sleaford (No. 41), Cottingham (No. 45), Nantwich (No. 46), and the East Window of Wilsford Church, may be taken as excellent and characteristic examples; and numerous other instances might be cited.

The symmetrical form of the centre-piece in *four-light* Windows affords, perhaps, more scope for the

display of elegant piercing, than that in those of a fewer or greater number of lights: certain it is, that the designs of the centre-piece in *four-light* Windows are usually of great elegance.

An unusual form of *four-light* occurs in the Church at GREAT HALE, in Lincolnshire. Here the ogee occupies the whole Window-head, and has its apex in that of the Window-Arch. It contains two smaller Arches, which carry also the primary Mouldings, and in other respects exactly resembles one of the side compartments of the larger Windows we have been describing.

In BOSTON Church, Lincolnshire, there occur some *four-lights* of this form, along with others of different character: the one which is given in the accompanying series (No. 47) may be said to belong to this class, rather than to any other, although the two ogee Arches are not brought into immediate contact with, and therefore do not support, the centre-piece, or carry the primary Mouldings.

Of *three-light* Windows, ST. MARY'S, Beverley (No. 43), and TEWKSBURY Abbey Church (South side of Nave), present good examples of nearly identical design.

In the East end of CROXTON Church, Norfolk, and in numerous other Churches, *three-light* examples of this class are to be found.

A beautiful instance of a *two-light* Window of this class is to be found in WITHAM Church, Essex.* Similar examples abound.

The largest and most remarkable Window of this class,—the West Window of YORK Cathedral,—has

yet to be described. Although possessing, in its composition, less of the true spirit of the class than, perhaps, any of the Windows which we have been considering, it has still the two large ogee Arches, carrying the primary Mouldings, and symmetrical, moreover, in form, which support a large triple centre-piece, consisting of three kite-shaped compartments, filled with foliated openings of uniform character, resembling plumes, in place of the usual rich oval centre-piece of the class.

It is the monotonous effect produced by the feather-like uniformity of the whole of the subordinate Tracery in the upper portion of this Window, as well as want of harmony in the design itself, which takes from it that prominence to which its great size and elaborate character would seem to entitle it; and it is on these accounts that it cannot be compared with its great rival at Carlisle, which, in simplicity and elegance of outline, as well as in richness of detail immeasurably surpasses it.

The design of the large Circular Window in the South Transept of LINCOLN Cathedral contains features strongly resembling some in this Window.

The South Transept of CHICHESTER Cathedral presents a fine and large Window of *seven-lights*, which, although totally different from all that have hitherto been described, may be said to belong to this Class. It has for its centre-piece a large spherical triangle, resting on the points of the two

* Brandon's "Analysis," Appendix, Fig. 36.

lateral Arches, and the head of the central light, which is filled with elaborate Curvilinear Tracery of great beauty. The stiffness of this outline presents almost a Geometrical design, but the details are of genuine Curvilinear character.

Nearly the same remarks may be applied to the large *nine-light* West Window of EXETER Cathedral, which, as well as all the Windows of the Nave of that Church, exhibit the adaptation of Curvilinear details to Geometrical outlines, evidently through a desire to conform as nearly as possible to the original design for the whole building.

We have hitherto been considering those Windows only of the first class, that possess a regular subordination in their tracery, the principal outline of which is traced by the first order of Mouldings, and the subordinate parts, or the outline of the foliated openings, by the second order.

There are, however, numerous Windows, in both this and the second class that we are about to consider, which do not exhibit this subordination, the designs of which are, in all other respects, almost identical with those of the more correct Types of these classes, and entitle them, therefore, to be ranked accordingly.

Of such Windows, those on the North and South sides of the Chancel of BOSTON Church, and that on the North side of the Chancel of HOLBEACH Church, Lincolnshire,* may be taken as examples of Class I.

* Brandon's "Analysis," Sect. I. Pl. 7.

CLASS II.

The second Class of Curvilinear Windows consists of those in which the Window head is divided into two equal and symmetrical portions, by two main Arches; the space above them being occupied occasionally by a small centre-piece, but generally by subordinate Tracery, having no relation to the rest of the design. They differ from the former class not only in the suppression of the centre-piece, as the principal object in the design, but also in the circumstance that the two dividing Arches are not constructed *independently*, one of their sides lying within, and being subordinate to the Window-arch on each side.

In Windows consisting of an equal number of lights, the inner sides of these Arches spring from a central mullion; but in Windows of an unequal number of lights, they usually spring from the two most central mullions, leaving, in this case, a larger space between them in the centre for subordinate Tracery, which is generally designed without any reference to, or correspondence with, that of the compartments on each side.

To this Class belongs the noblest Curvilinear Window in the kingdom, the *nine-light* East Window of Carlisle Cathedral (No. 37), which has already been fully described, Part I. p. 63. The effect of this fine Window is so much enhanced by the prominence given to its elegant centre-piece, as to render it a matter of regret that this feature

is so seldom seen in Windows belonging to this class.

The West Window of Durham Cathedral, and the East Window of the Church of Austin Friars, in London, of *seven lights*, are fine examples of this class.

Malmsbury Abbey Church contains a fine *six-light* Window of minute and elegant Tracery of the same character.

Of *five-light* Windows, the following may be mentioned as good examples:—The East Window of the Aisles of the Chancel of the Church of the Holy Trinity at Hull (No. 52), the Windows at the End of the South Transepts of Yaxley and Northborough Churches (Nos. 49 and 50), and the East Windows of Houghton-le-Spring and Ringstead Churches (Nos. 51 and 53).

St. James Deeping and Boston in Lincolnshire, Albrighton Church in Shropshire, and Wimmington Church* in Bedfordshire, contain *five-light* Windows of this kind; and the East Window of Otford Church, Kent, Bricett Church, Suffolk, and Ratby Church, Leicestershire, also of *five lights*, are handsome Windows of similar design.

Of *four-light* Windows there is a large number: a very common form is shewn in the side Windows of the Church of Austin Friars, and at the East End of Worsted Church in Kent, the design of which is identically the same. The four large Windows which light the lower part of the octagonal Lantern of Ely Cathedral, are of this class; as well

* Brandon's "Analysis," App., Pl. IV. Fig. 48.

as the East Window of South Wooton Church in Norfolk, and Long Stanton Church in Cambridgeshire.*

Three-light Windows of this kind are found in Holbeach and Aunsby Churches in Lincolnshire; in Elmsett Church, Norfolk; in Mickleham Church,† Surrey; in Little Waltham in Essex,‡ and in numerous other buildings.

AUNSBY.

Chenies Church, Buckinghamshire,§ contains a good example of a *two-light* Window of this class.

CLASS III.

This class is not remarkable for many Windows of large size, the singular and fine Window of *seven lights* at the East end of Mildenhall Church in Suffolk being a rare example:‖ of *five-lights*, *four-lights*, and *three-lights*, however, the number is very large. Oundle Church has a *five-light* in the South Transept, and a *three-light* in the Chancel. Boston

* Brandon's "Analysis," App. Pl. IV., Fig. 54.

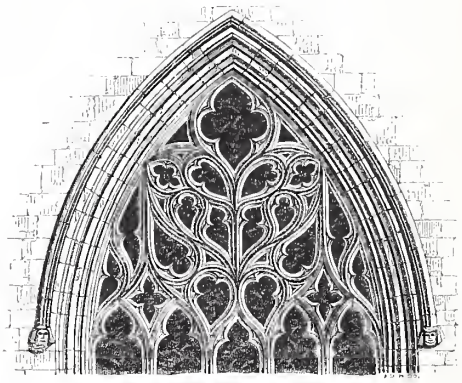
† Ibid. Fig. 40.

‡ Ibid. Fig. 55.

§ Ibid. Sect. I. Pl. III. Fig. 1.

‖ Paley's "Manual of Gothic Architecture," p. 178.

Church has a remarkably fine example of *five lights*, containing no less than nineteen foliated openings;



BOSTON.

Sleaford Church has also one at the West end of the South Aisle containing as many as twenty. Lindfield Church * in Sussex, has an East Window of *five lights* of this kind, and Cheltenham Church has one in the North Transept.

A Window in the North Aisle of Sleaford Church (No. 57), and another in Shiere Church, Surrey,† are good examples of *four-light* Windows of this Class; to which may be added the Clerestory Windows of Selby Abbey Church, and the East Window of Maxstoke Church, Warwickshire.

Bolton Abbey Church in Yorkshire, Tilsworth Church in Bedfordshire,‡ Sutton-at-Hone in

* Brandon's "Analysis," Sect. I. Pl. VI.

† Ibid. App. Pl. IV. Fig. 49. ‡ Ibid. Figs. 42 & 43.

Kent, HESSETT Church in Suffolk, and QUENIBOROUGH Church in Leicestershire, contain fine *three-light* Windows of this Class. Those in the North aisle of HEDON Church, Yorkshire (No. 55), and the Founders' Chapel of TRENT Church, Somersetshire (No. 54), are peculiar and elegant specimens of the same kind. GREAT CLAYBROOK Church in Leicestershire (No. 58), KENILWORTH Church in Warwickshire, ST. JAMES DEEPING in Lincolnshire, RIBCHESTER Church in Lancashire, WEST HADDON Church in Northamptonshire, GLANVILLES WOOTON Church in Dorsetshire, and BILTON Church in Warwickshire, all contain plain *three-light* Windows of this character.

HEDON Church exhibits also in the North Aisle a pretty example of a *two-light* Window of this class (No. 56).

Under this denomination also comes a very large class of Windows, which are to be found in every part of the Kingdom, containing what has been called *Reticulated Tracery*, or Tracery formed by the repetition of the same foliated opening, usually an ogee quatrefoil, but occasionally a trefoil.

The whole of the Windows of the Lady Chapel of WELLS Cathedral are of this description; but the largest example perhaps is the *seven-light* East Window of MILTON Abbey Church, the Tracery of which consists of a network of eighteen ogee quatrefoils. The *two-light* at the East end of the North Aisle of BILLINGBOROUGH Church (No. 59), is an early example of the same kind.

CHELTENHAM Church has a *five-light* at the

West end of the North Aisle, North Wingfield Church in Derbyshire, an East Window of *four lights*, Charlton Horethorne in Dorsetshire an Aisle Window, and Swayton Church in Lincolnshire a West Window of *three lights* of this form; and other examples abound everywhere.

CHARLTON HORETHORNE.

This kind of Tracery is construeted on a principle which exhibits a nearer approach, perhaps, than any other to that of Flamboyant work, which divides the Window-head by means of prominent waved lines, into a number of small and similar compartments.

Indeed nearly the whole of the Curvilinear Tracery of the Continent may be said to belong to this class; the existence of flowing Tracery, possessing subordination and divided by arches, whether *engaged* or *independent*, being, both in France or Germany, extremely rare.

It cannot be considered otherwise than as a remarkable fact, that, although the construction of Tracery was undeniably practised on a large scale on the Continent before it appeared in this country, and continued in use almost as long, such was the adherence to the original type, and, when it was abandoned, so rapid was the progress of debasement, that the severe outline of the circle carried by two arches may be said to have been almost immediately

succeeded by the extravagant forms of Flamboyance; and Continental Tracery may be, in general terms, divided into two great classes, the first of which is analogous to our earliest Geometrical, and the second to our latest Curvilinear: to the varied forms of our late Geometrical, and the graceful outline of our earliest Flowing Tracery, the architecture of the Continent offers scarcely a single parallel.

Of the subordinate parts of the Tracery of Curvilinear Windows — the foliated openings — and their relative size and position, much might be written. No description, however, can convey an adequate idea of their unlimited variety, nor any given set of terms define the endless changes of form which they are made to assume according to the fancy of the architect, or the nature of the space they are designed to fill. It may perhaps be convenient for the purpose of description to have particular terms by which to designate their relative position in a Window-head; thus the term *convergent* may be aptly applied to those openings, the heads of which incline to the centre of the compartment or figure in which they lie: of this kind are the principal trifoliated openings in the centre-pieces of Selby (No. 42), Beverly (No. 44), and Cottingham (No. 45).

COTTINGHAM.

In the same way, those openings, the heads of which diverge from the centre, and lie in the direction of the sides of the compartments, may with

propriety be termed *divergent;* as the whole of the cinque-foliated openings in HOUGHTON-LE-SPRING (No. 51), and the four central trifoliated openings in BILLINGBOROUGH (No. 56), and SLEAFORD (No. 57).

SLEAFORD.

Again, the term *reversed* may be applied to those openings, the heads of which hang down; as in the two trifoliated openings in the central compartment of HECKINGTON (No. 38), the centre-piece of NANTWICH (No. 46),* and the side compartments of SELBY (No. 42.)

SELBY.

It must not be forgotten, however, that these differences in the arrangement of the subordinate portions of the Tracery do not constitute the leading characteristics of Windows, which are always to be sought for in those outlines which mark out the general subdivisions of the design, and are traced by the primary Mouldings. In fact, pierced openings of the three kinds above described, are more frequently than otherwise found united in the same Window, and very often in the same compartment of a Window; and their use appears to be as little capable of being referred to any fixed law, as the combination of the Mouldings in the Window-arch.

It is, indeed, impossible to prescribe any definite rule to the modern architect in either of these

* These terms have been suggested by Mr. Freeman in a letter to the editor of the "Ecclesiologist," No. LXI. p. 33.

respects, or any particular limits within which to fetter his powers of invention, for, great as is the number of Curvilinear Windows which are left to us, such is the variety of pattern, that it is difficult to find two in the kingdom which exactly resemble each other; and provided a design be carried out as formerly, in the spirit and feeling of the period to which it belongs, both as regards outline and detail, great is the license which the artist may take to himself, in the arrangement of his foliated openings, and the form and distribution of his Mouldings.

The accompanying series, small as it is, and selected out of the many hundreds of beautiful examples which exist, may still serve to illustrate this vital principle of variety, so inherent in the designs of these Periods.

The End.

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